

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the	application of	)	
		)	Atty Dkt No.: 47171-00125USC2
	Munro et al.	)	
		)	Group Art Unit: Unknown
Serial	No.:	)	•
		)	Examiner: Unknown
Filed:	July 30, 1998	)	
		)	
For:	METHOD AND APPARATUS	)	
	FOR DISCRIMINATING AND	)	
	COUNTING DOCUMENTS	)	

#### TRANSMITTAL OF FORMAL DRAWINGS

Assistant Commissioner			
for Patents			
Washington, D.C. 20231			

EXPRESS MAIL MAILING LABEL

NUMBER: \_\_\_\_\_\_EK506616925US

DATE: \_\_\_\_\_\_September 5, 2000

I hereby certify that this paper or fee is being deposited with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to: Assistant Commissioner for Patents, Washington D.C. 20231.

Thomas Yulla Ha

Dear Sir:

Enclosed are eight-one (81) sheets of formal drawings including Figures 1-68.

Applicants understand that no additional fees are required. However, if the Office determines that any comparison fees or other additional fees are required, the Commissioner is authorized to charge any such fees to Jenkens & Gilchrist Deposit Account No. 10-0447/47171-00125USC2(CUMM:125—2).

If there are any matters which may be resolved or clarified through telephone interview, the Official Draftsman is respectfully requested to contact Applicants' undersigned attorney at the number indicated.

Respectfully submitted,

Paul R. Kitch

Reg. No. 38,206

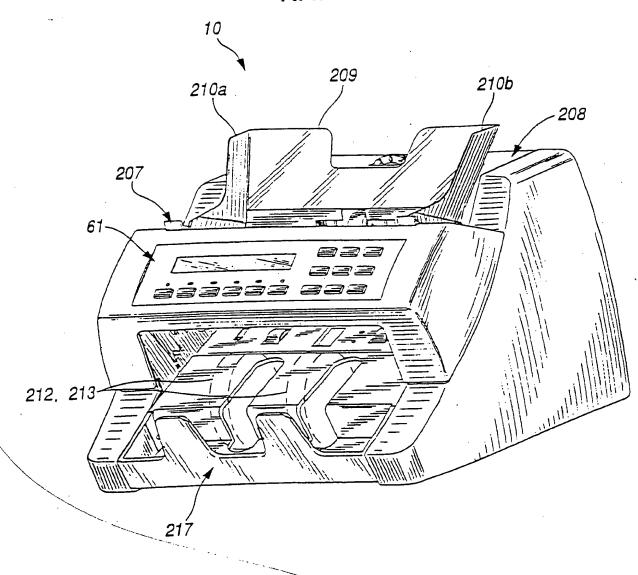
JENKENS & GILCHRIST

1445 Ross Avenue, Suite 3200

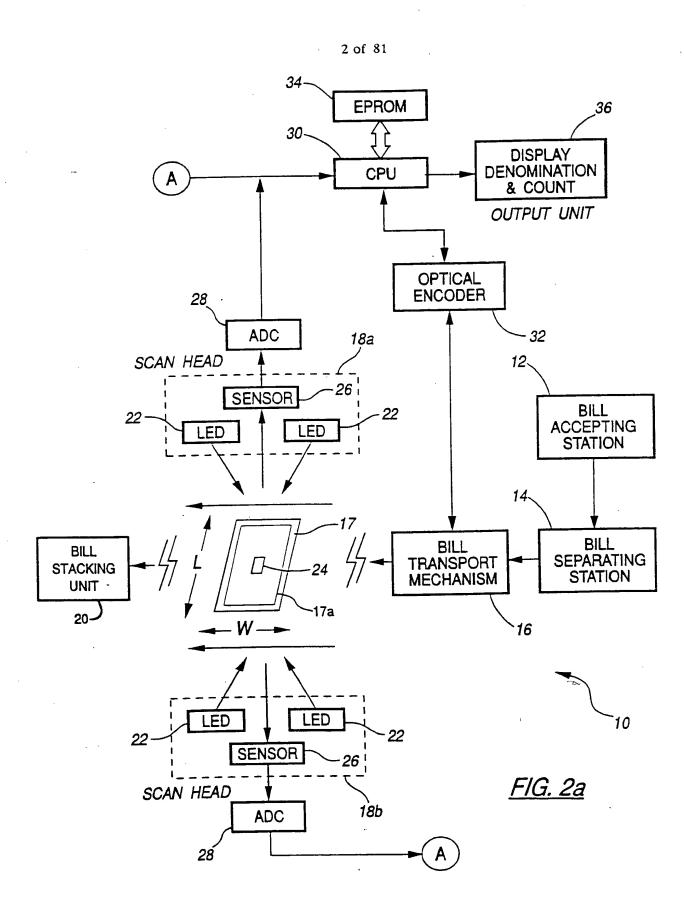
Dallas, TX 75201-2799

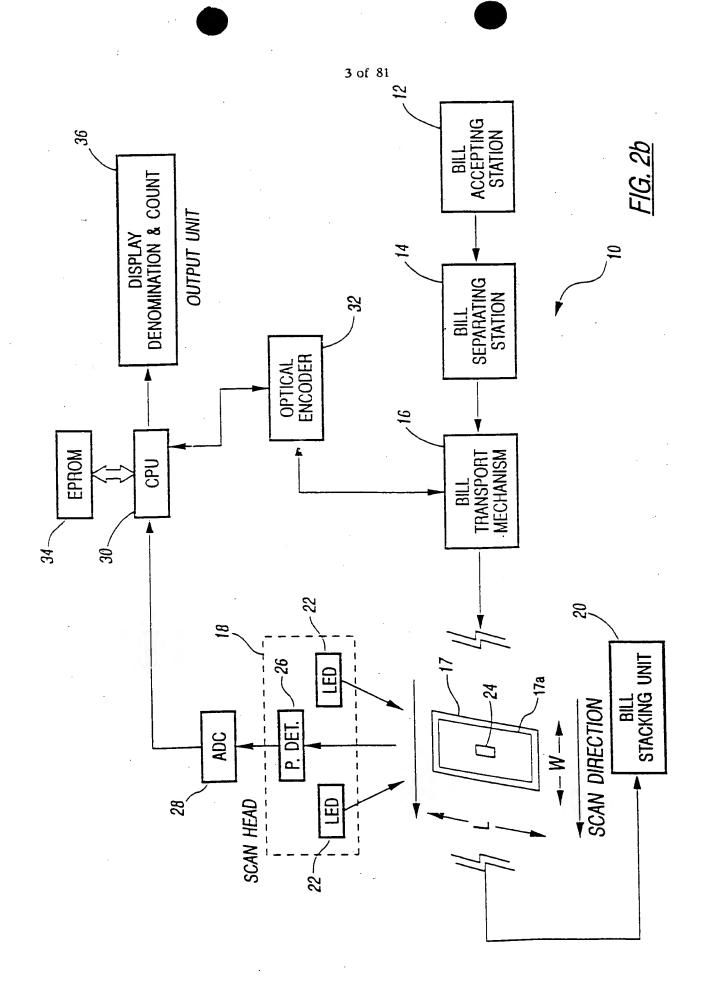
312/425-8517

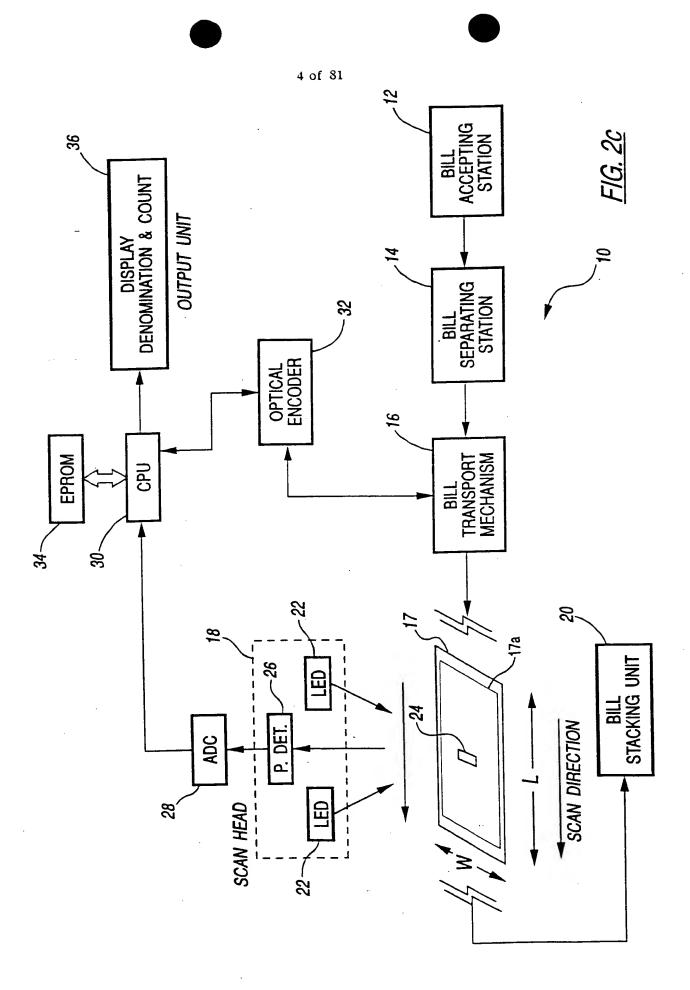
1 of 81

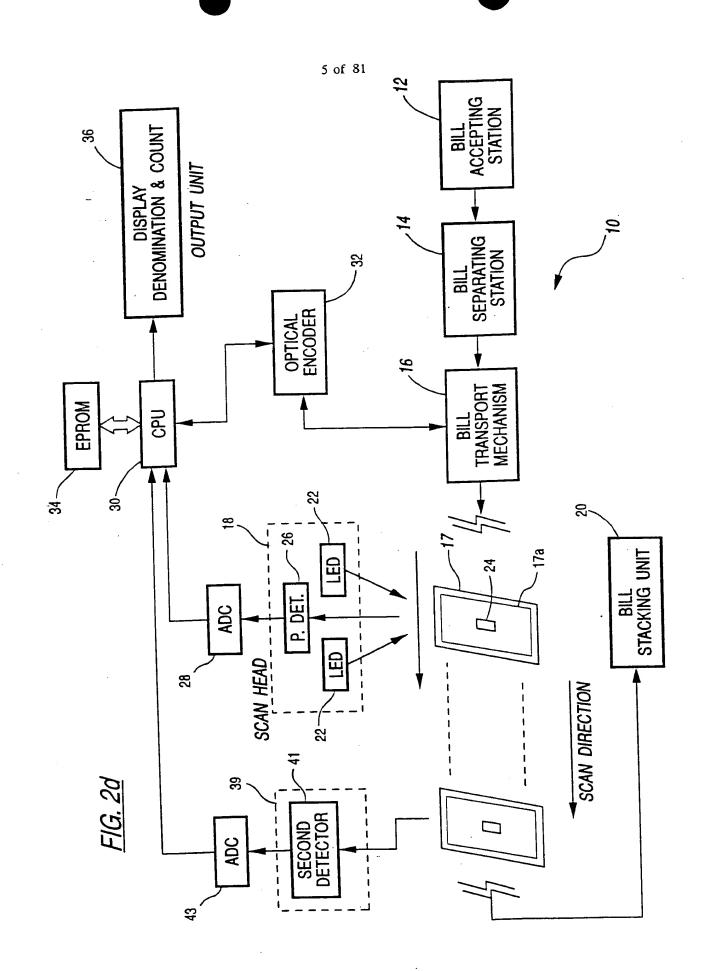


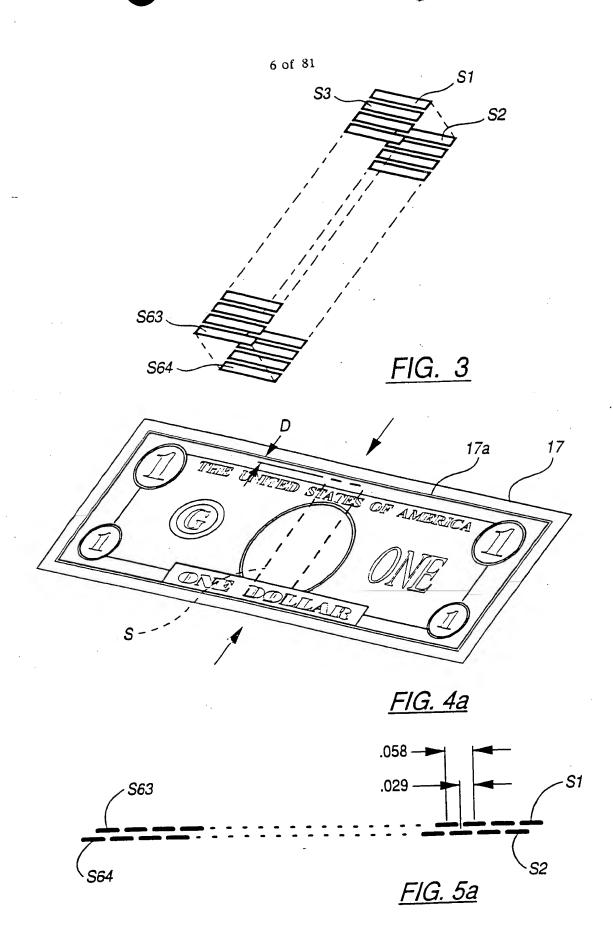
<u>FIG. 1</u>



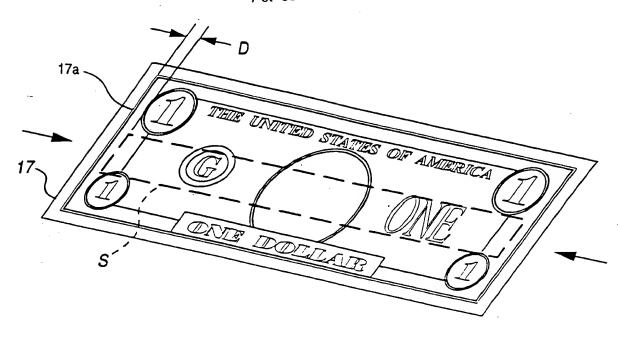




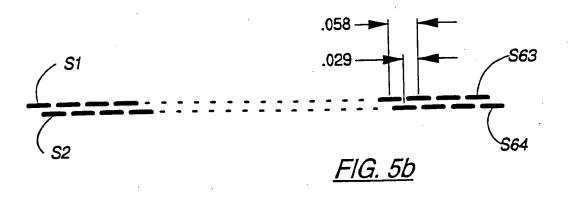








*FIG. 4b* 



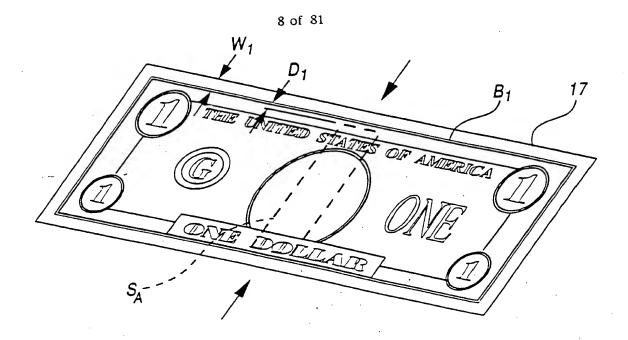


FIG. 6a

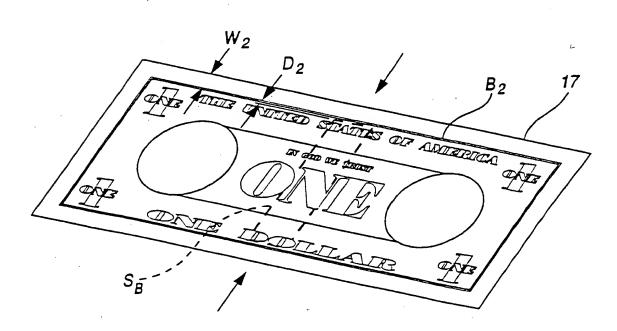
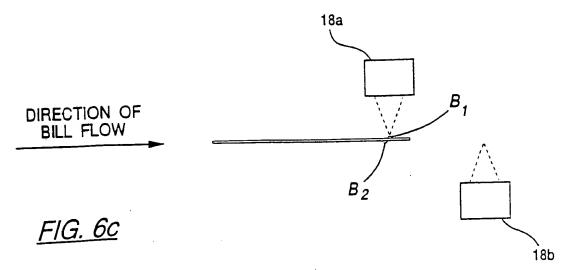


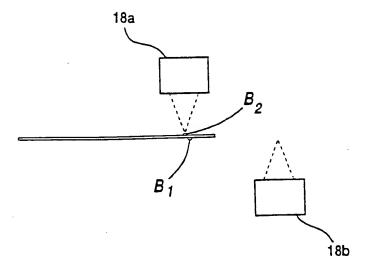
FIG. 6b

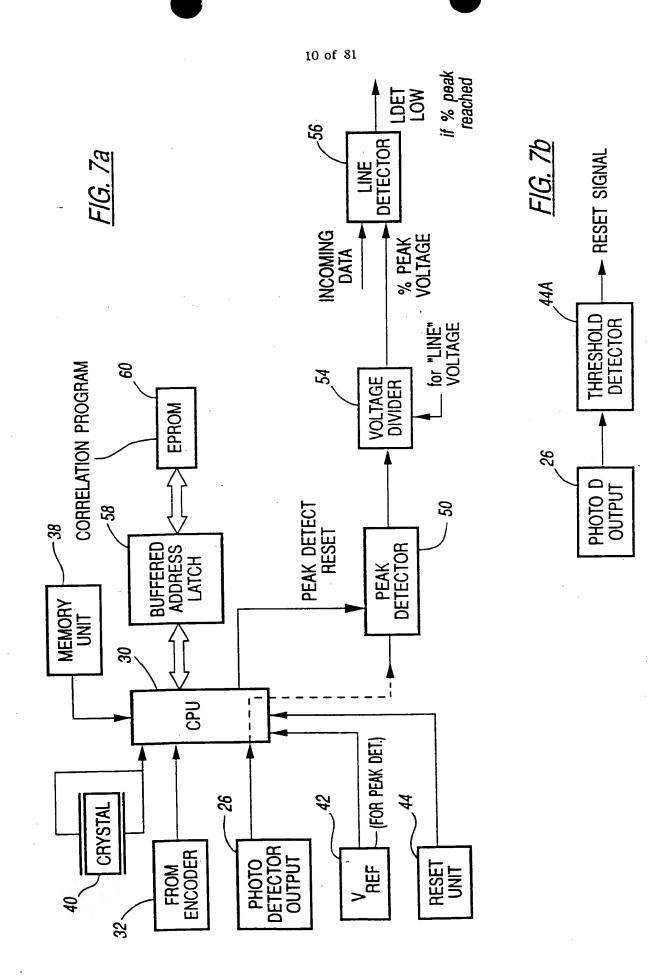
9 of 81



DIRECTION OF BILL FLOW

<u>FIG. 6d</u>

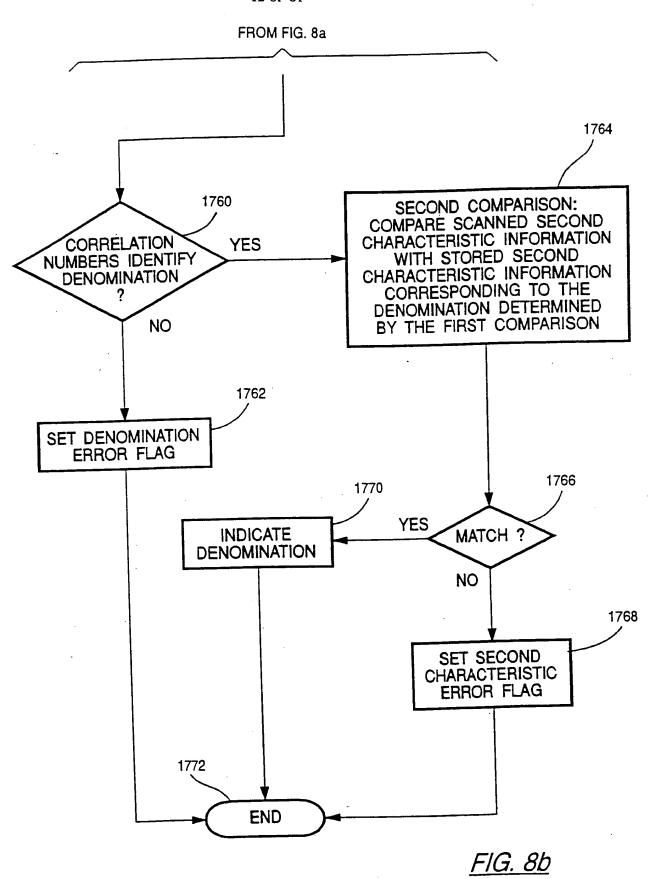




11 of 81 1748 **START** 1750 RETRIEVE INTENSITY INFORMATION 1752 RETRIEVE SECOND CHARACTERISTIC INFORMATION 1753 **CLEAR DENOMINATION** ERROR FLAG 1754 CLEAR SECOND CHARACTERISTIC ERROR FLAG 1758 FIRST COMPARISON: COMPARE SCANNED INTENSITY INFORMATION TO EACH SET OF STORED INFORMATION AND CALCULATE CORRELATION NUMBER FOR EACH DENOMINATION

TO FIG. 8b *FIG. 8a* 

12 of 81



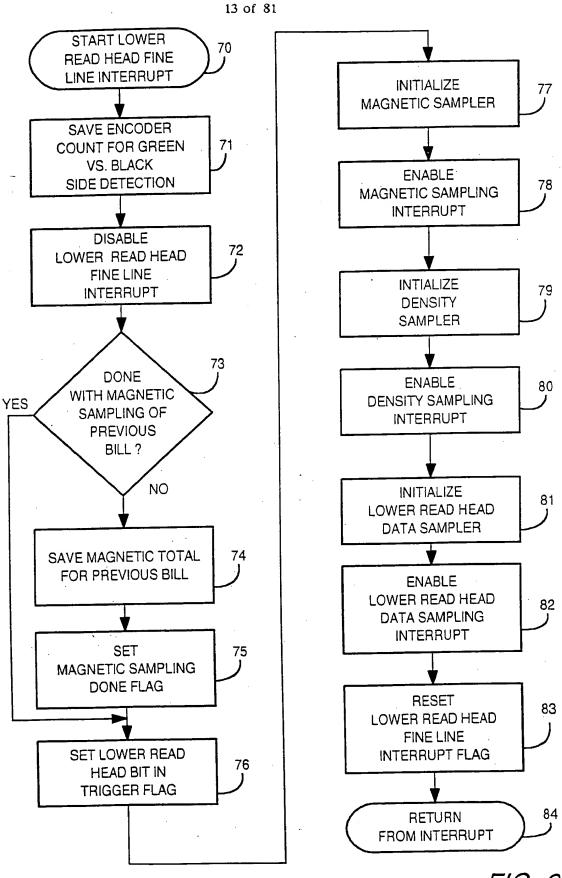
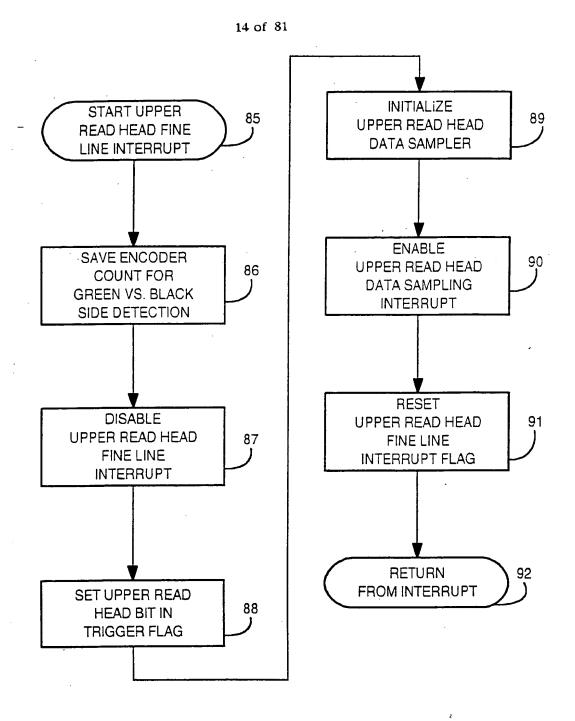
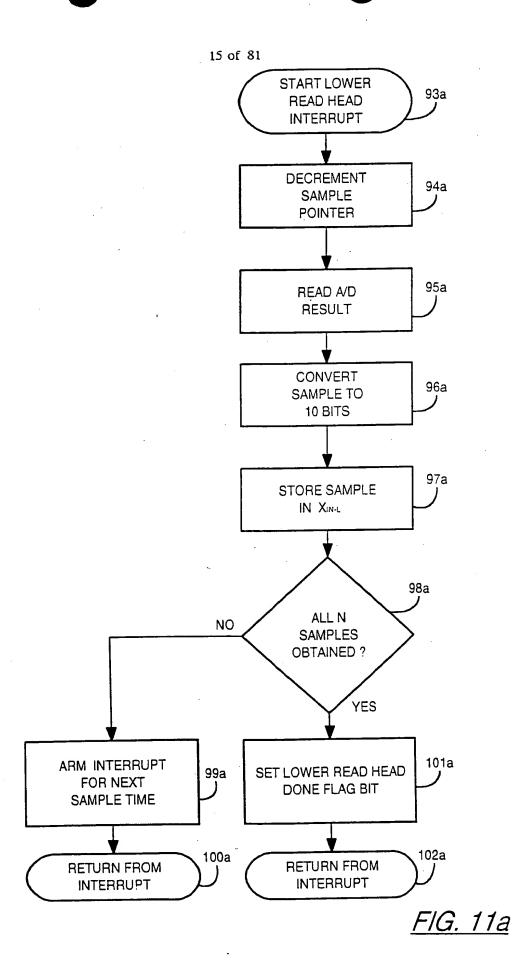


FIG. 9



*FIG. 10* 



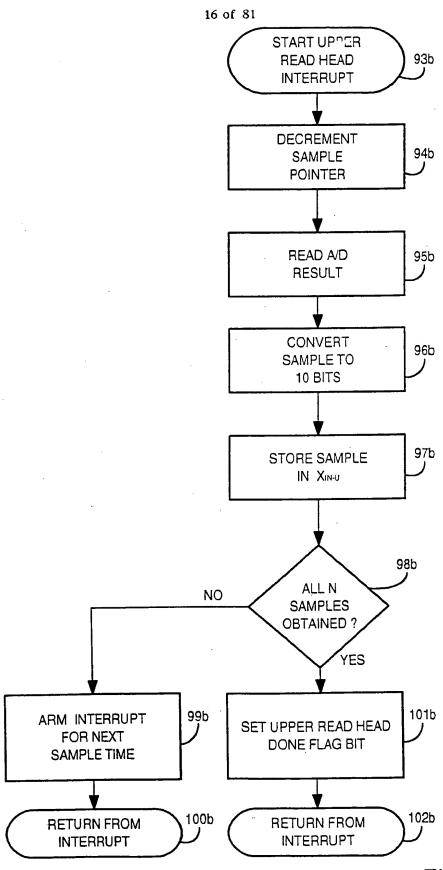
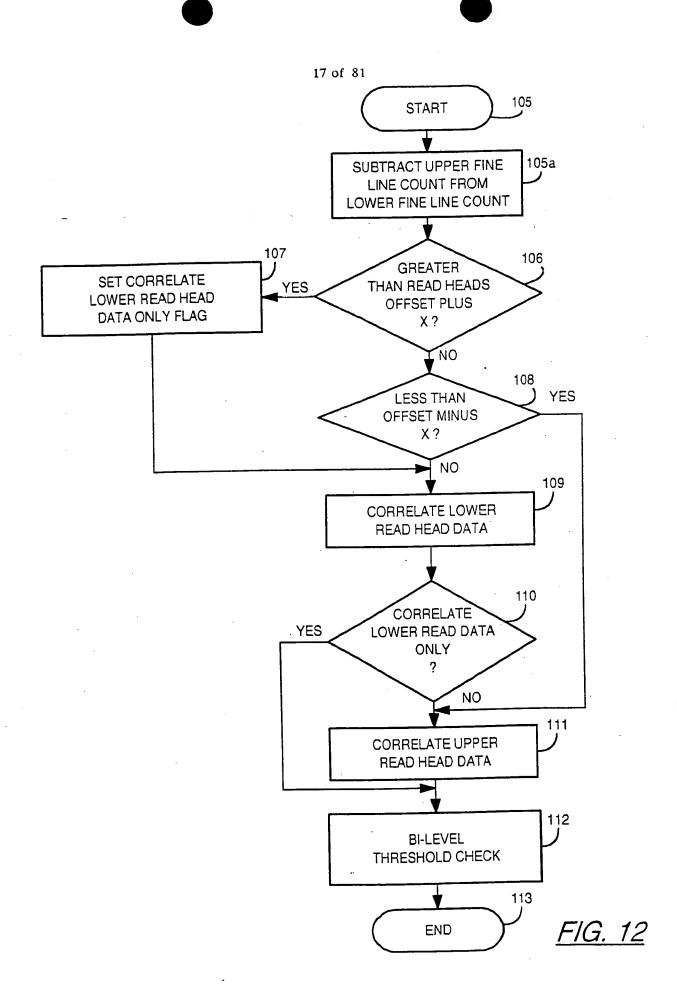
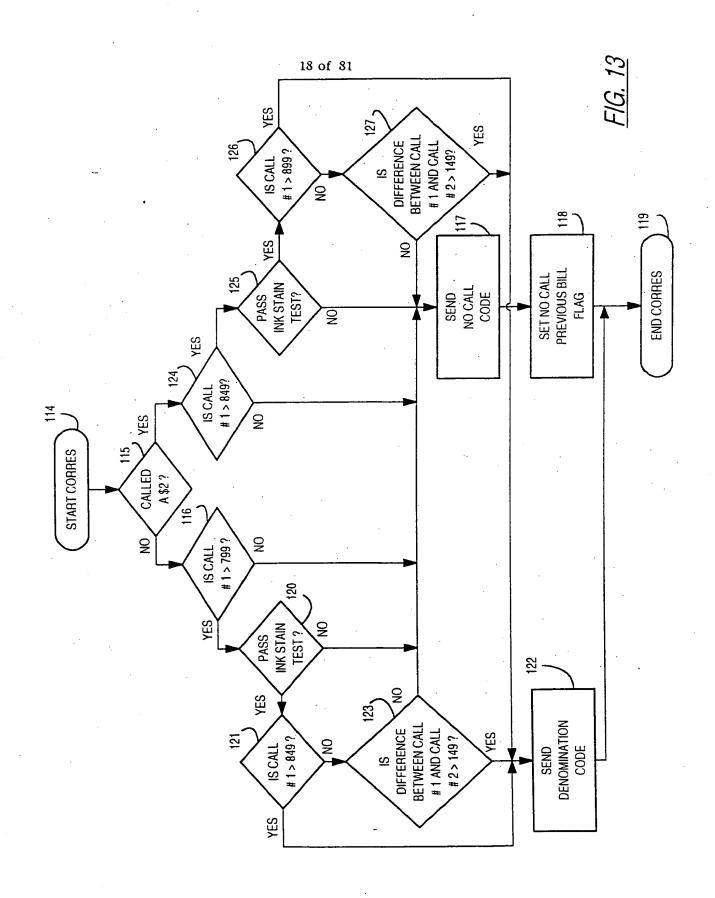
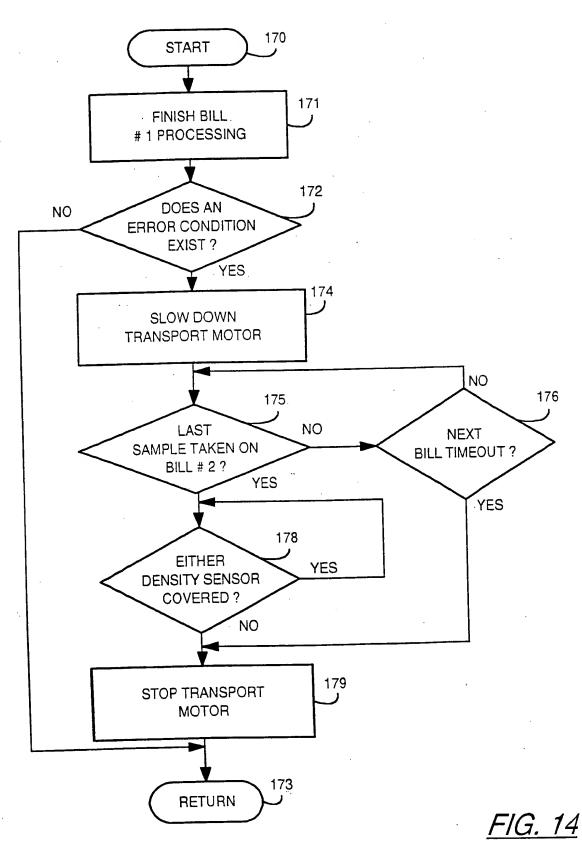


FIG. 11b

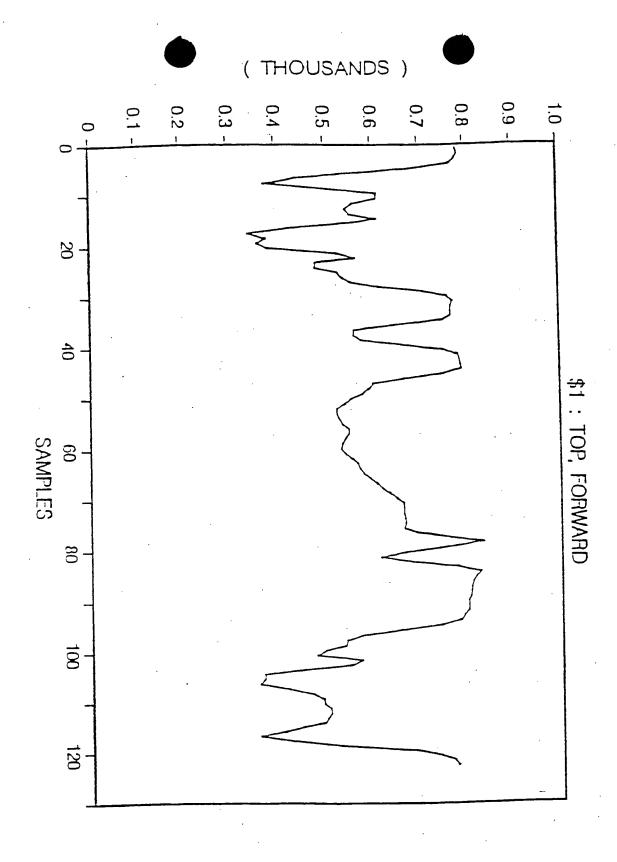




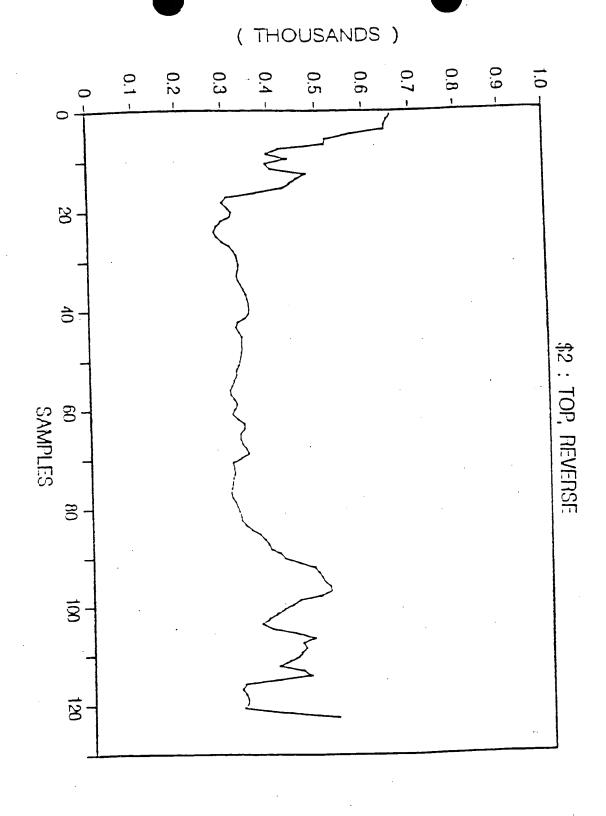
19 of 81

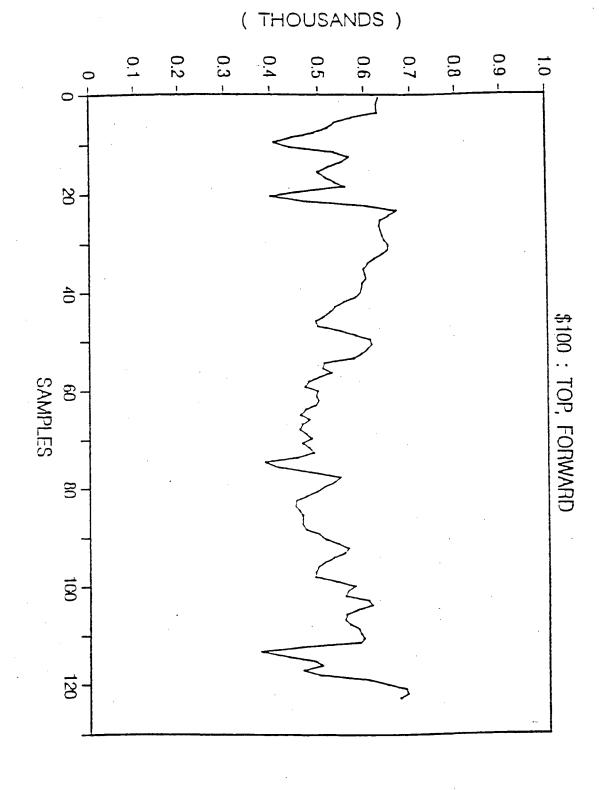






18 lo 02





# 20 Dollar Bill

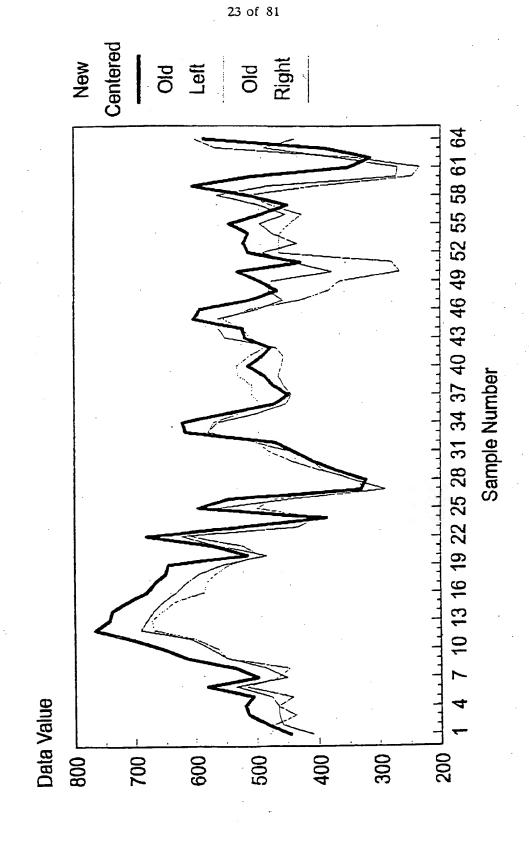
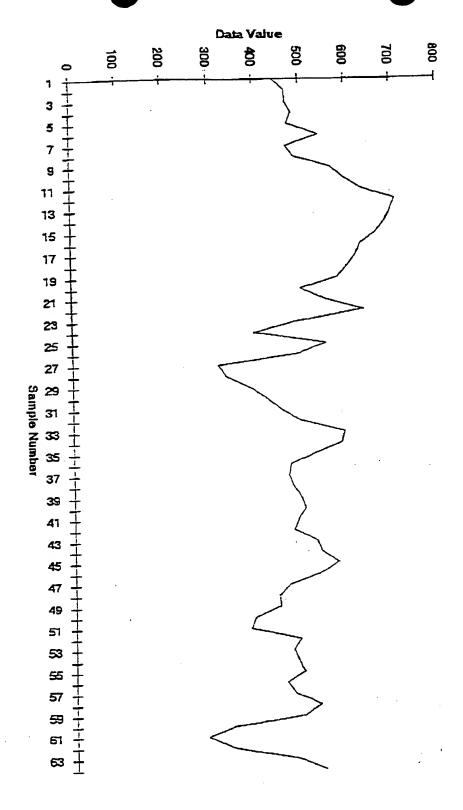
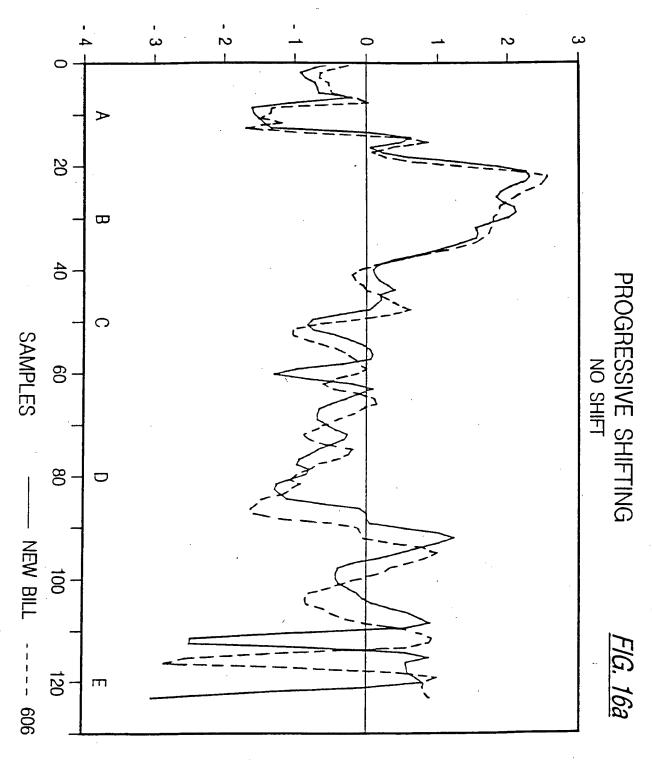
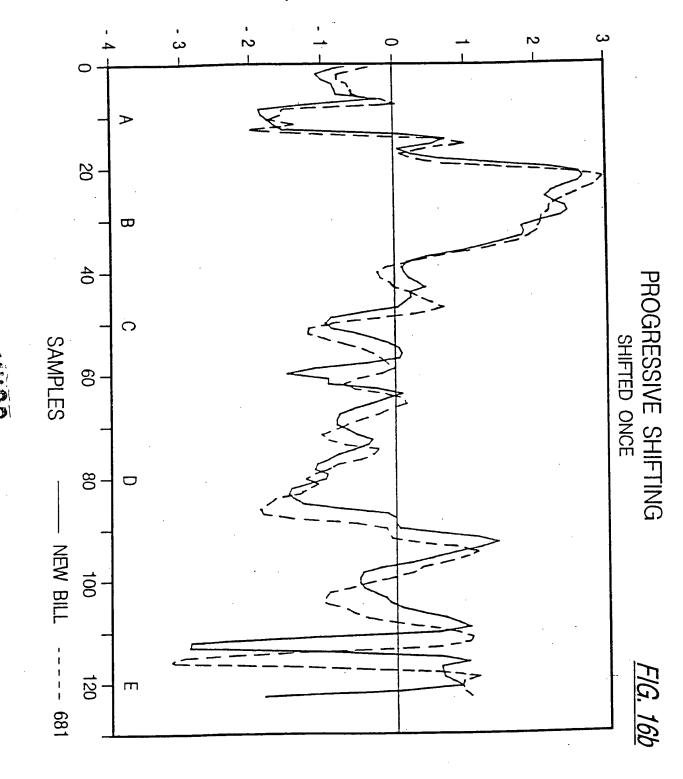


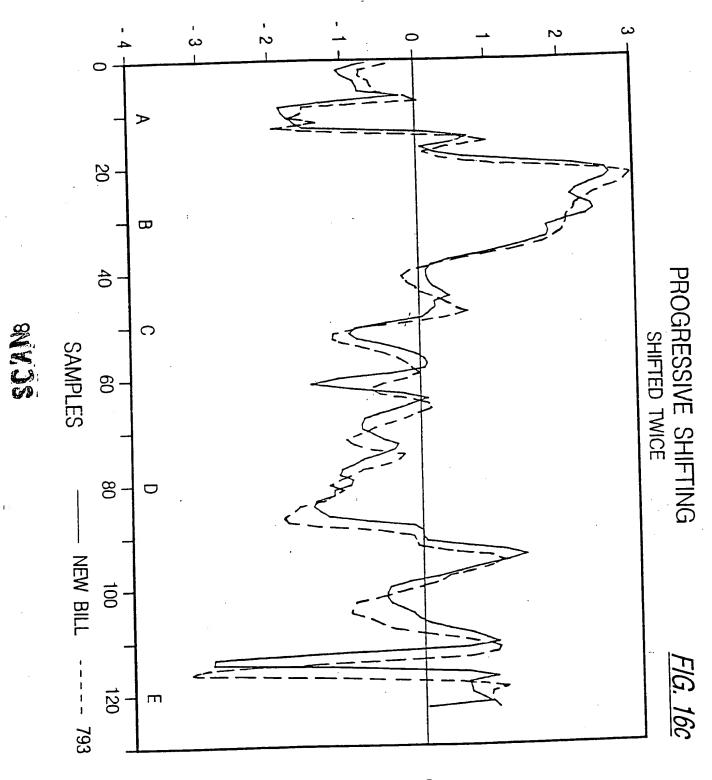
FIG. 15d



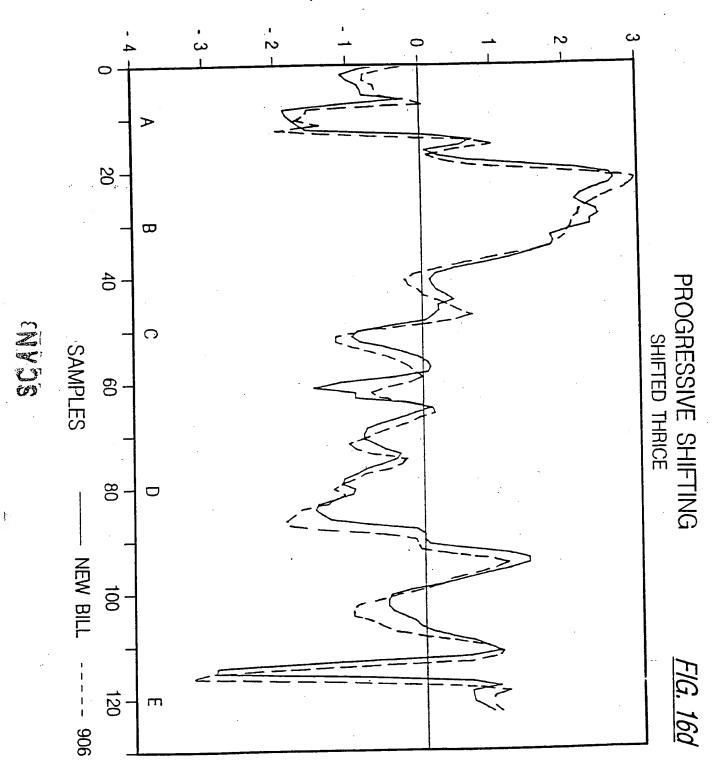


18 30 22

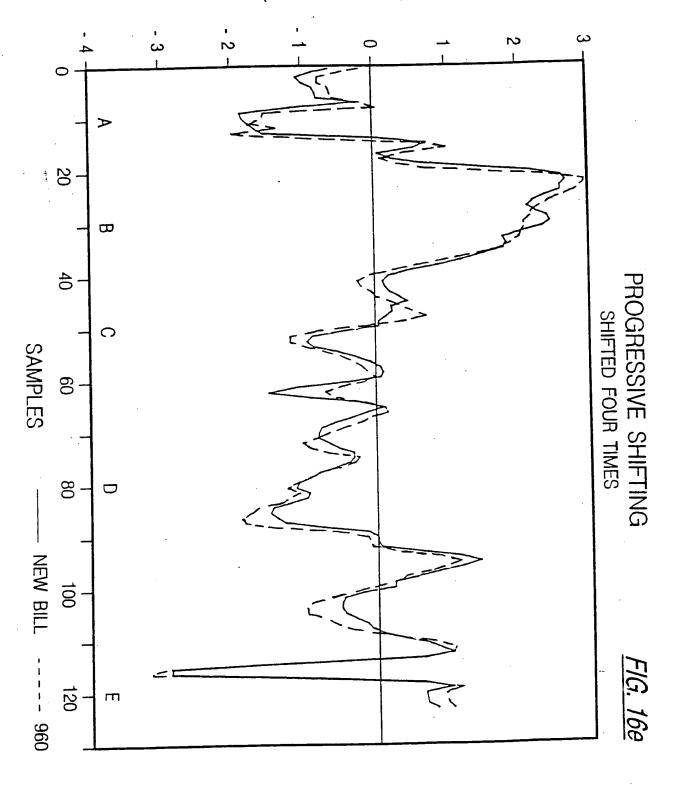




18 30 LZ



· 新典的 · 斯奥斯曼 香 · 唐· 西沙里市 通過學院



S S S S S

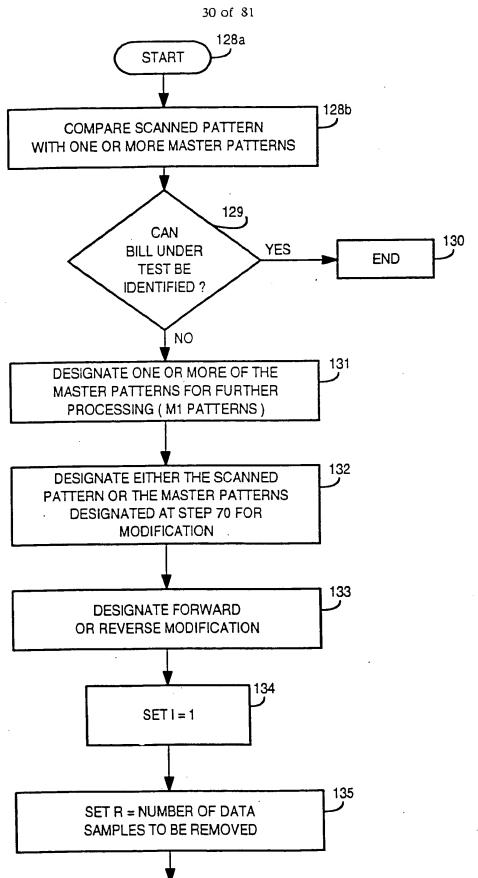
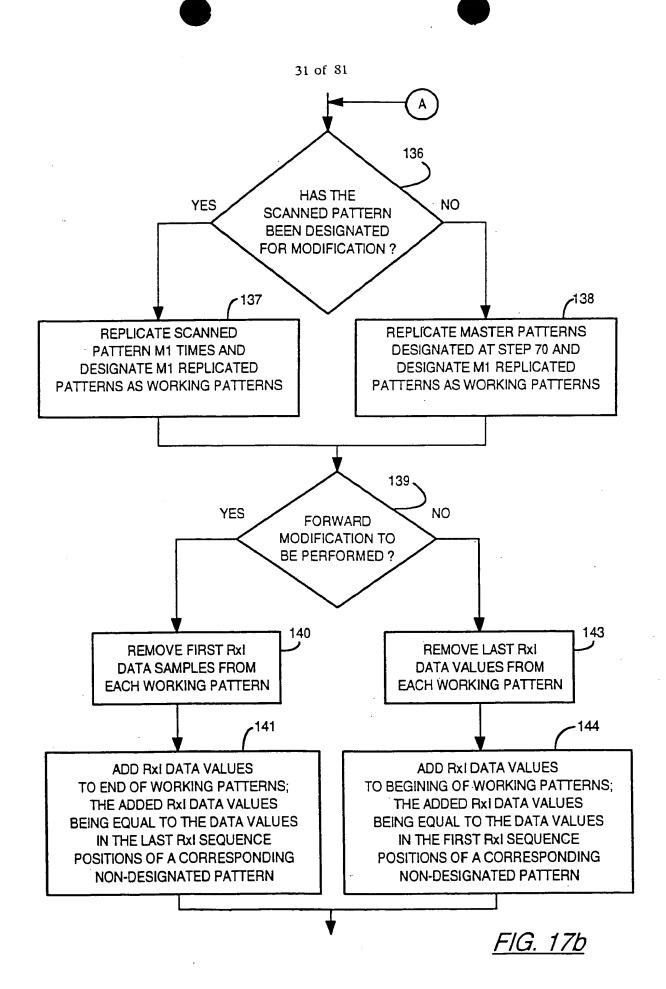


FIG. 17a



32 of 81

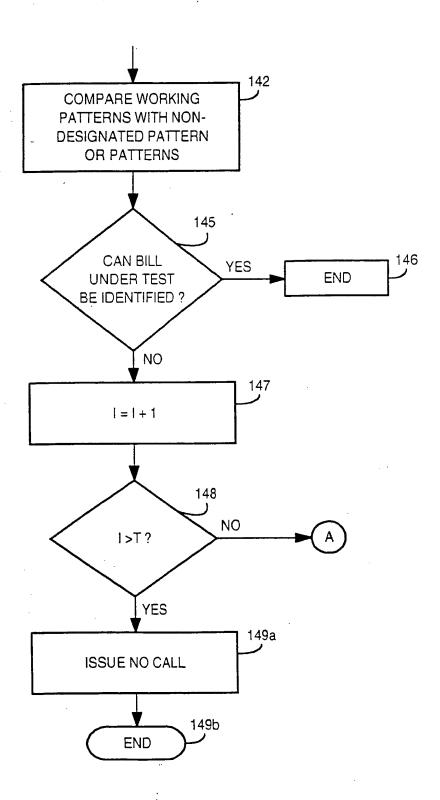
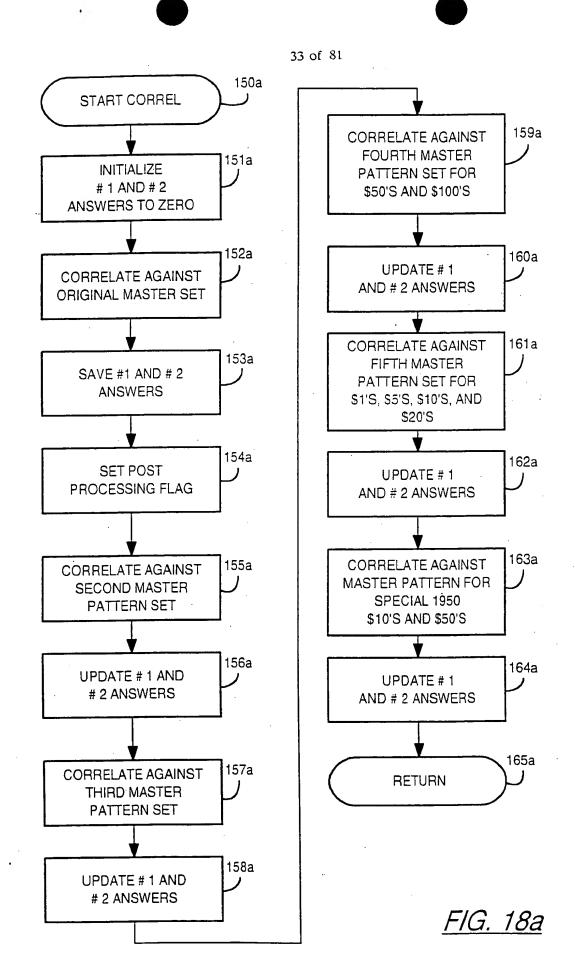
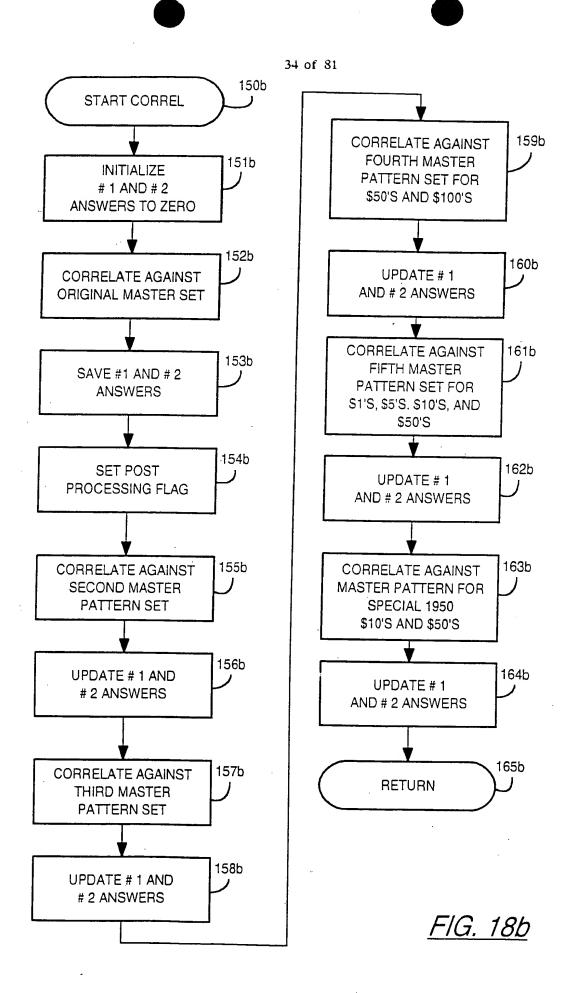
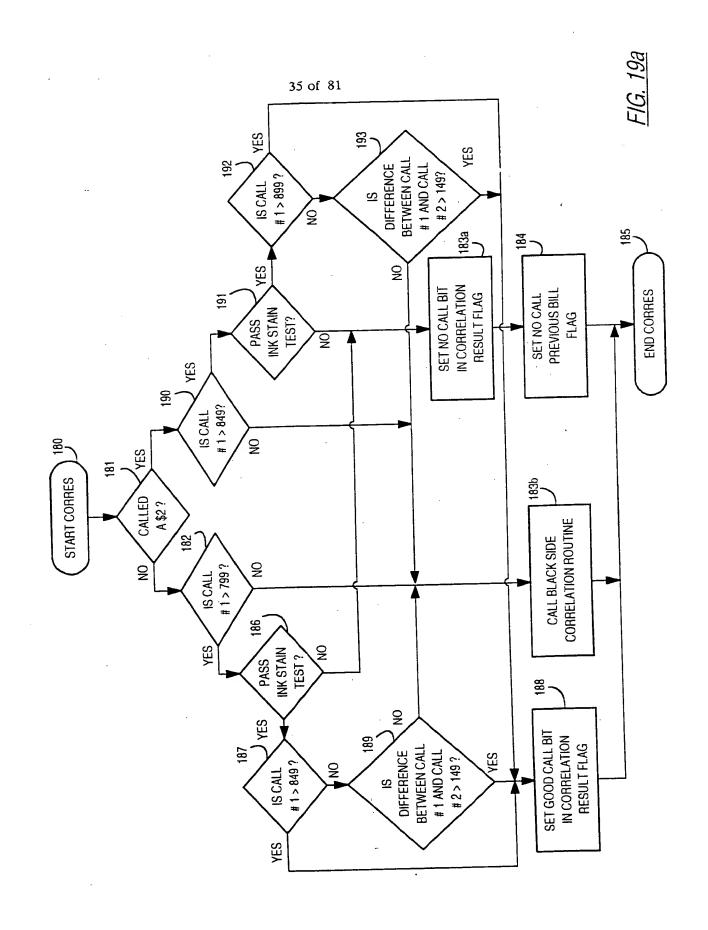
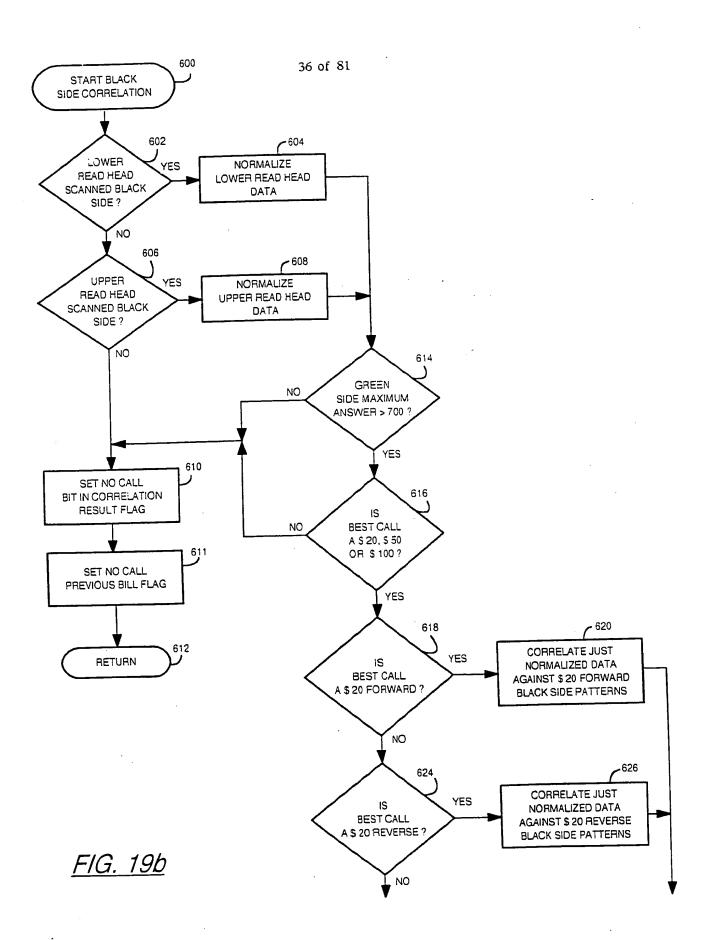


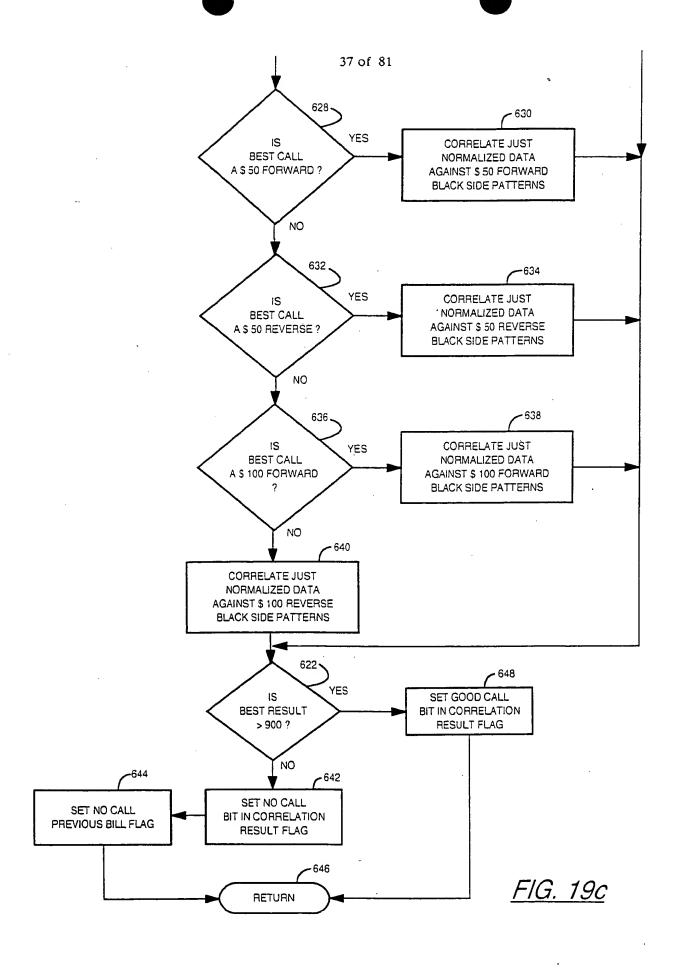
FIG. 17c

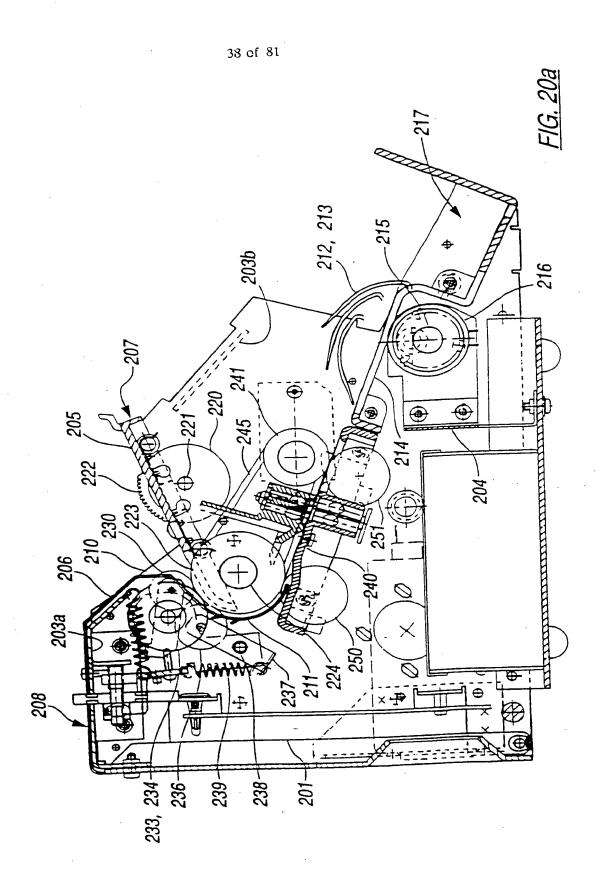












39 of 81

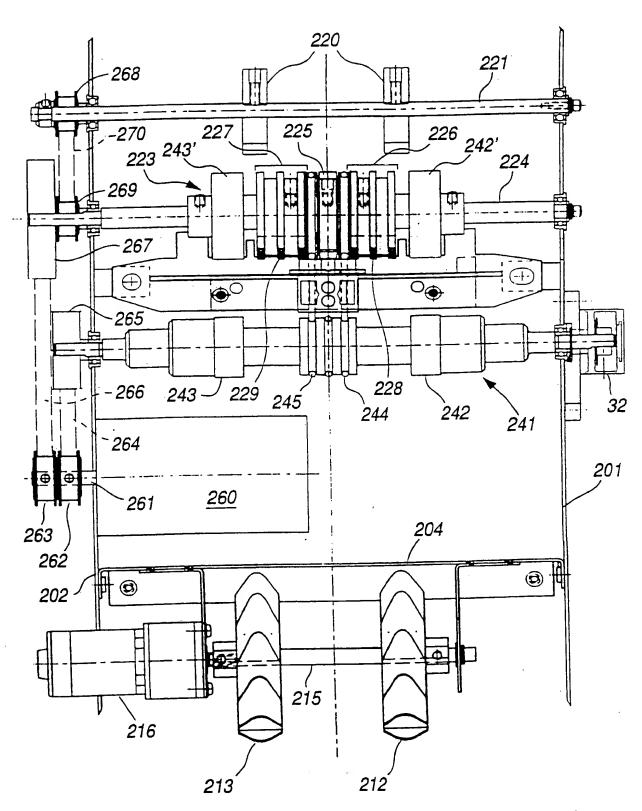
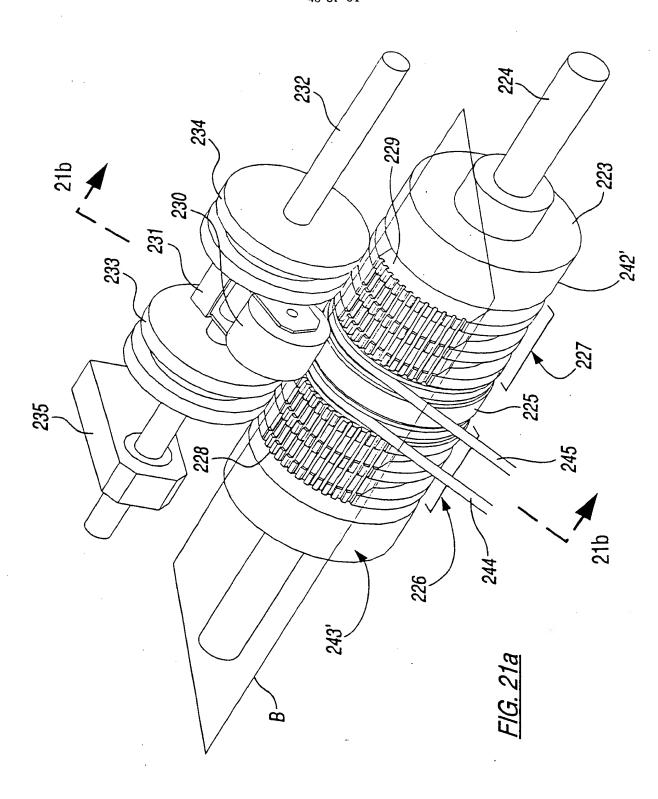
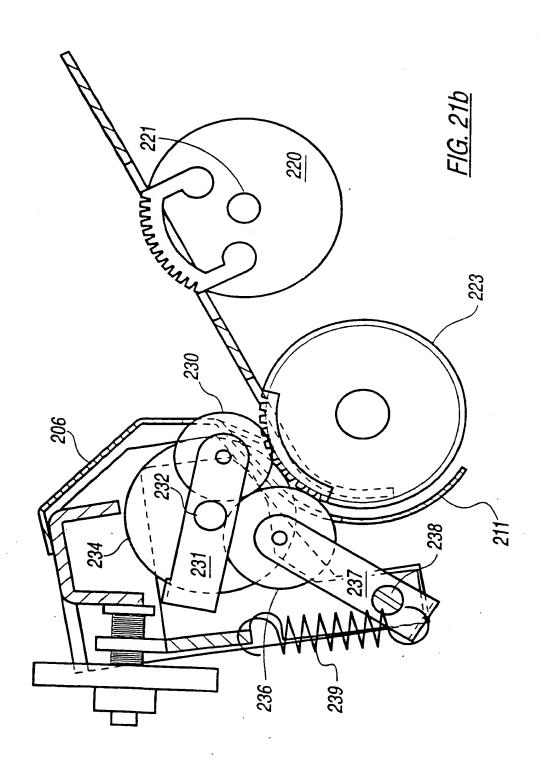


FIG. 20b

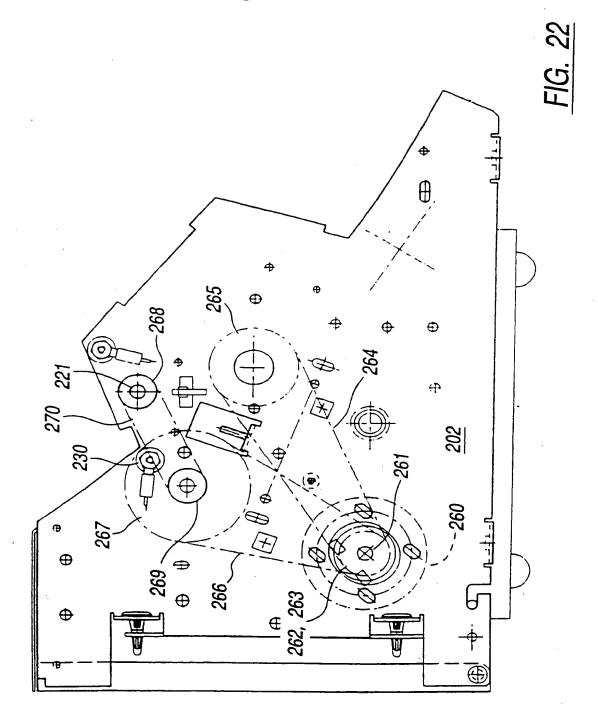
40 of 81



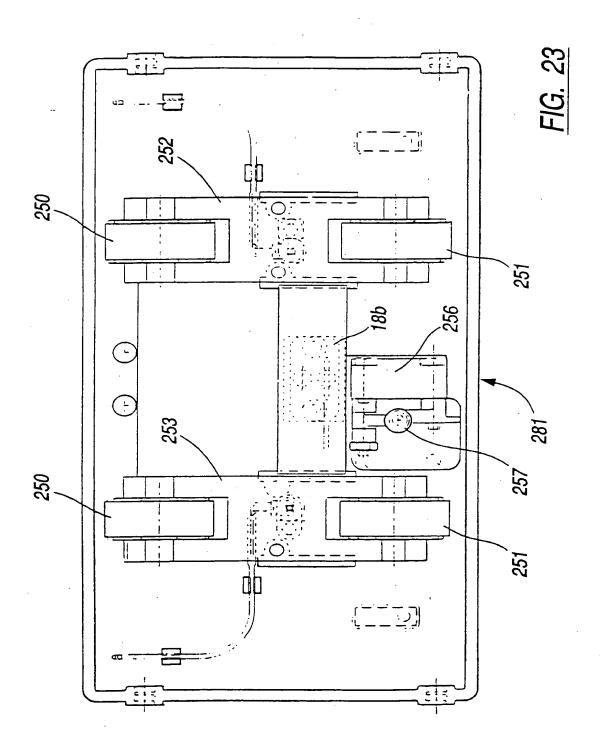
41 of 81



42 of 81



43 of 81



44 of 81

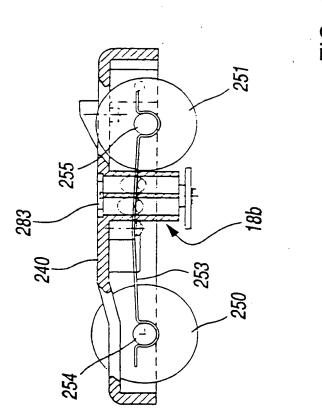
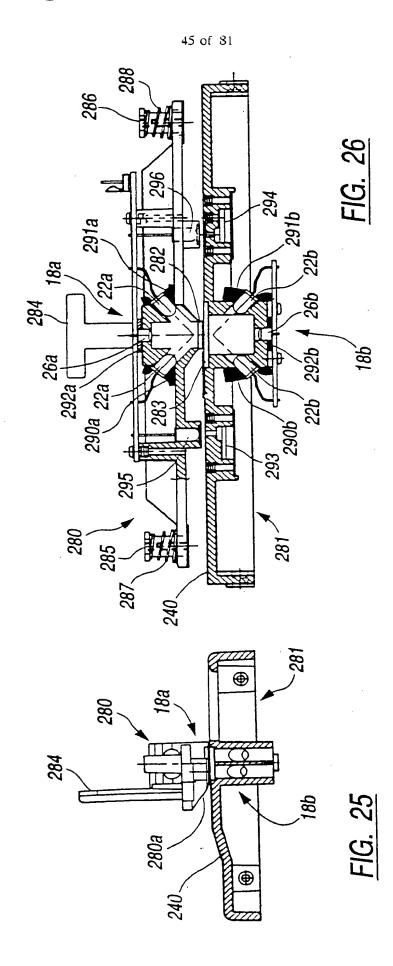
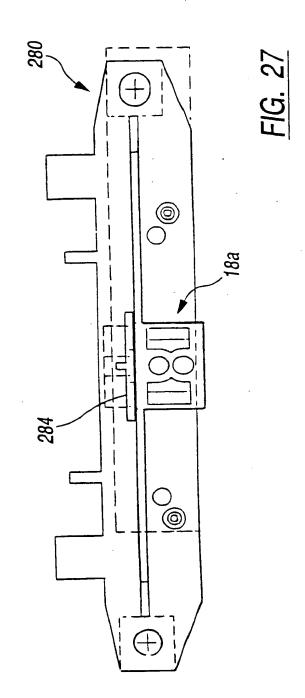


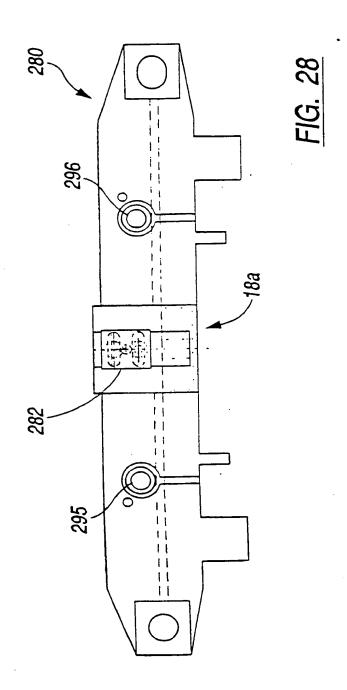
FIG. 24



46 of 81



47 of 81



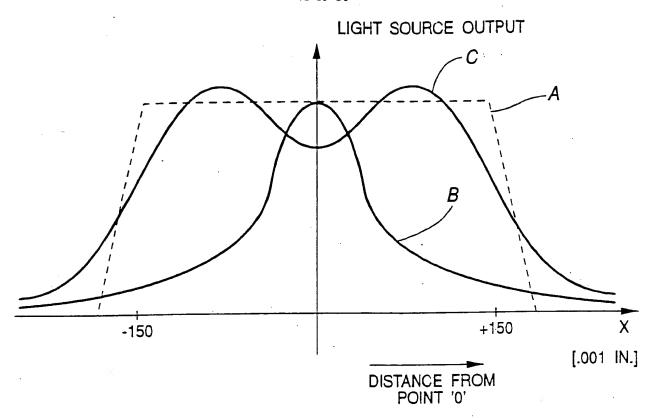


FIG. 29

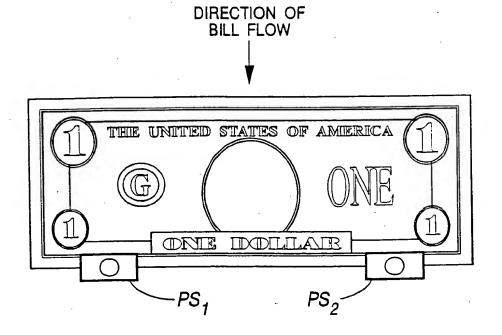


FIG. 30a

49 of 81

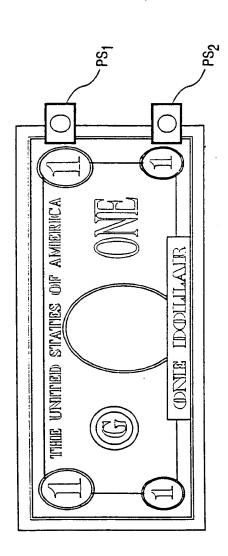
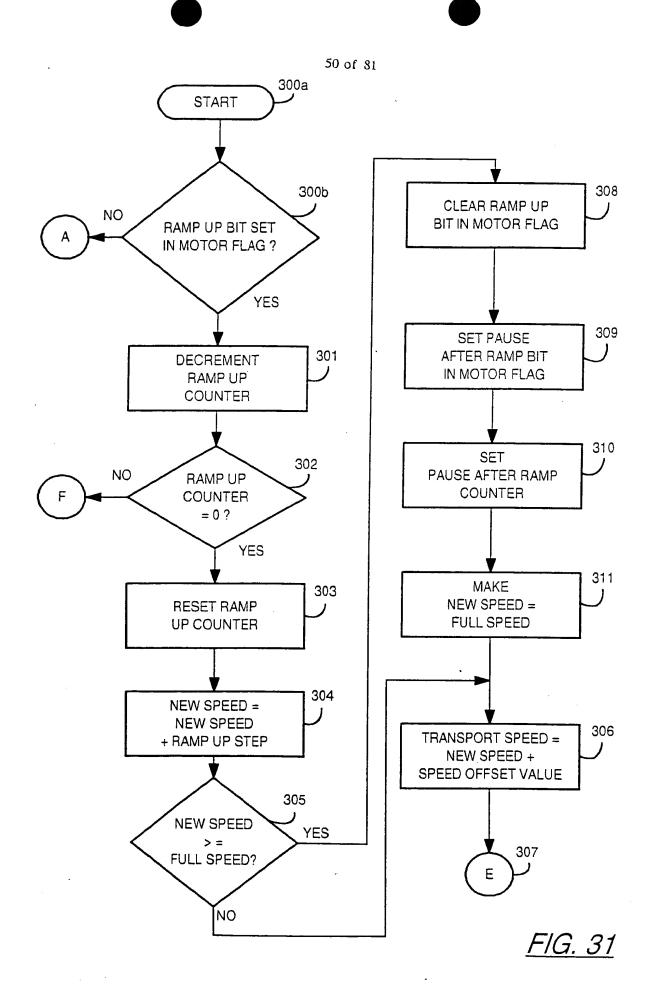
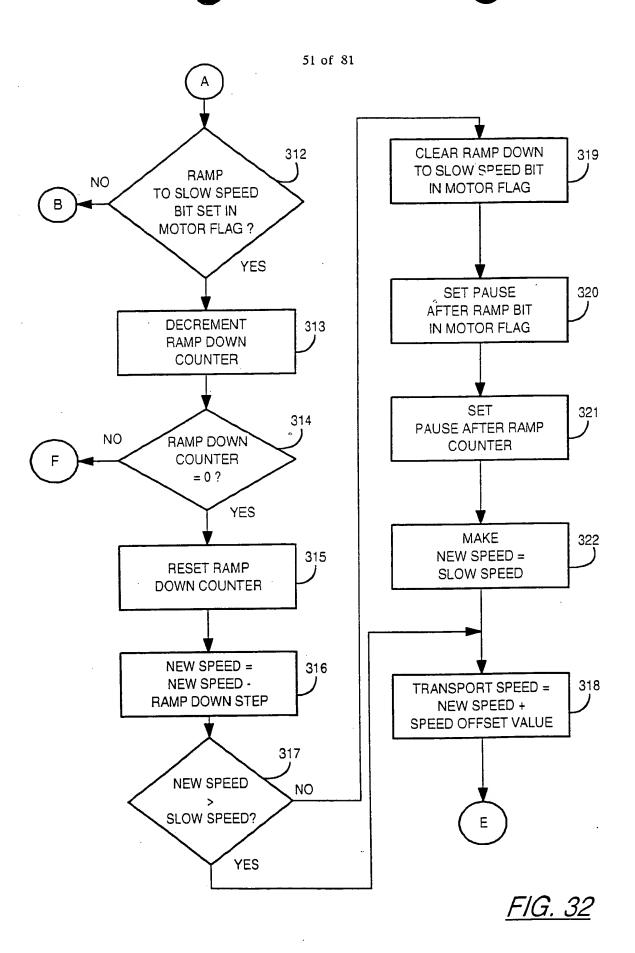
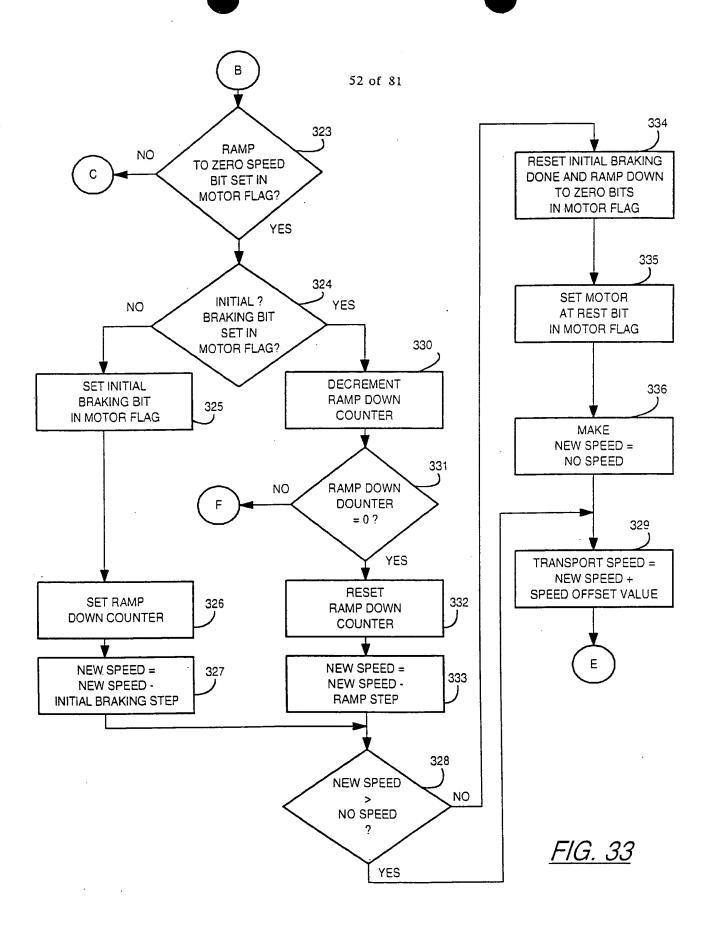


FIG. 30b

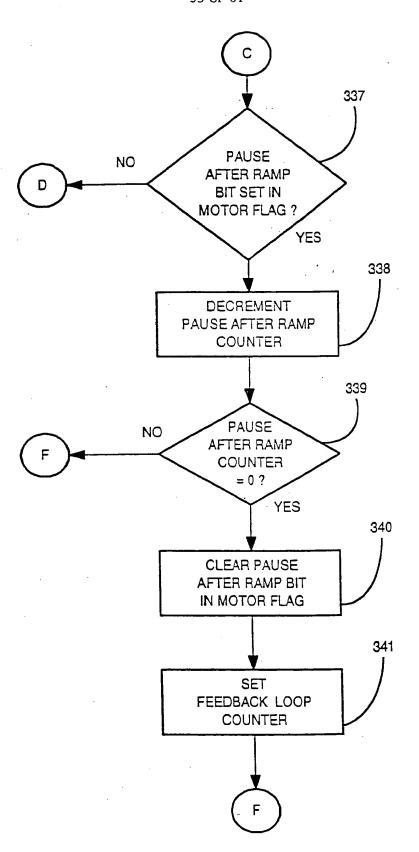
DIRECTION OF BILL FLOW



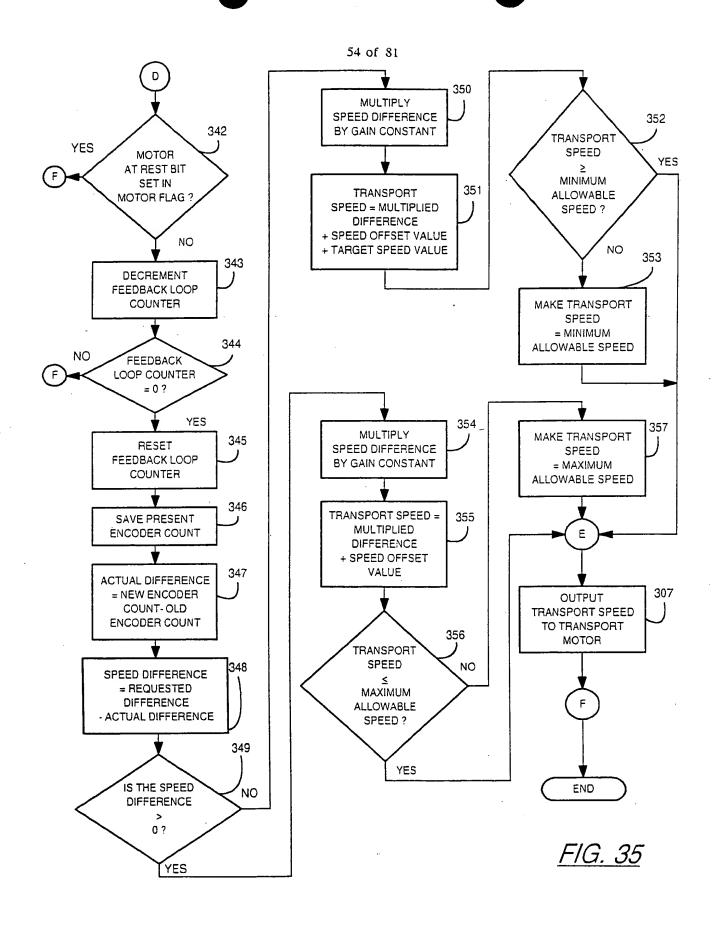




53 of 81



*FIG. 34* 



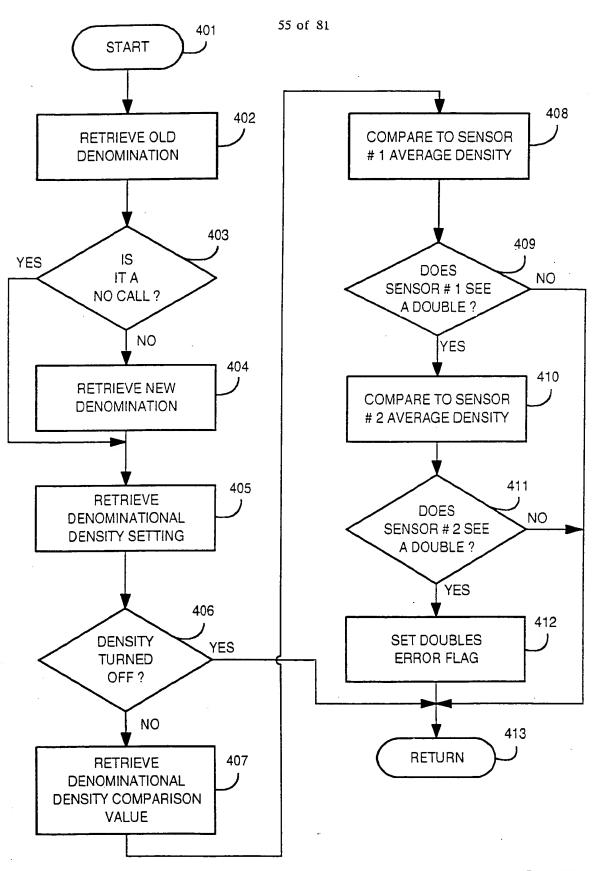


FIG. 36

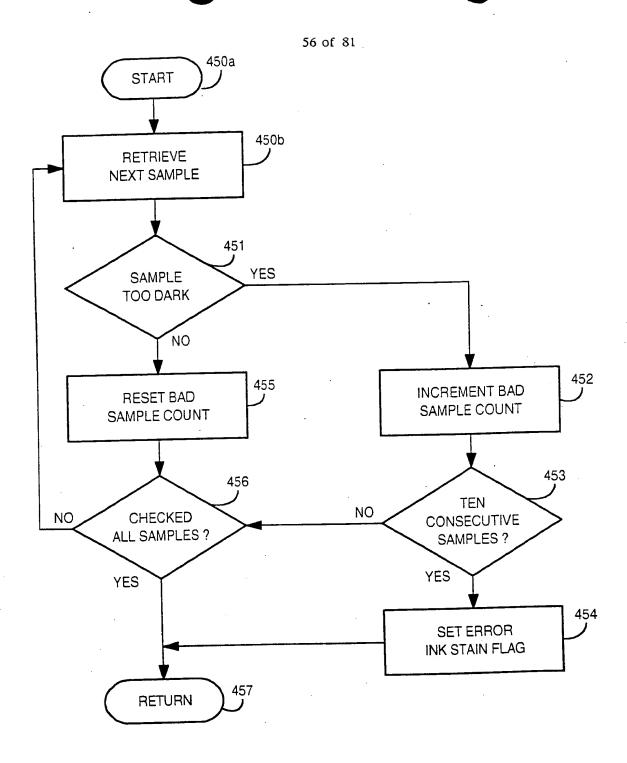
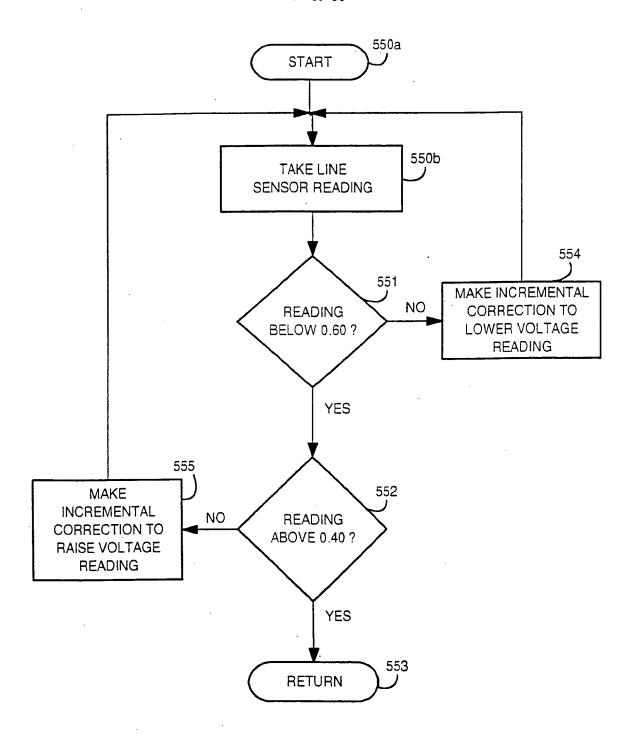
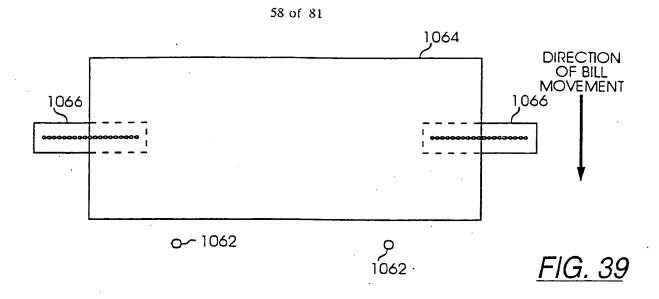
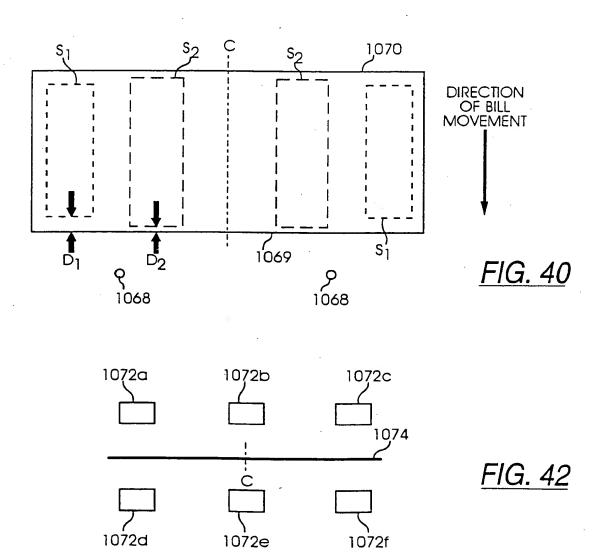


FIG. 37

57 of 81







\$20 Defore Shifting: Corr = 644

2000

1500

1000

500

-1000

-1500

-2000

-2500

29

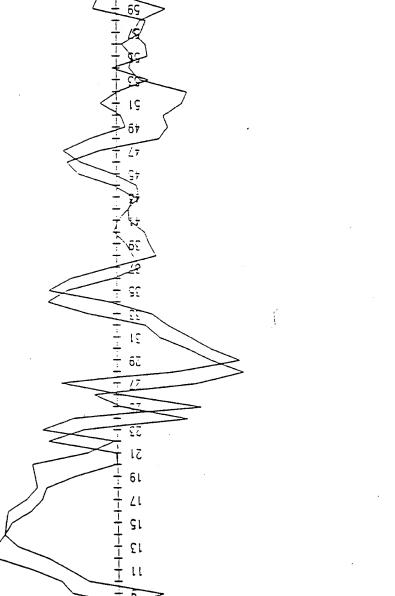
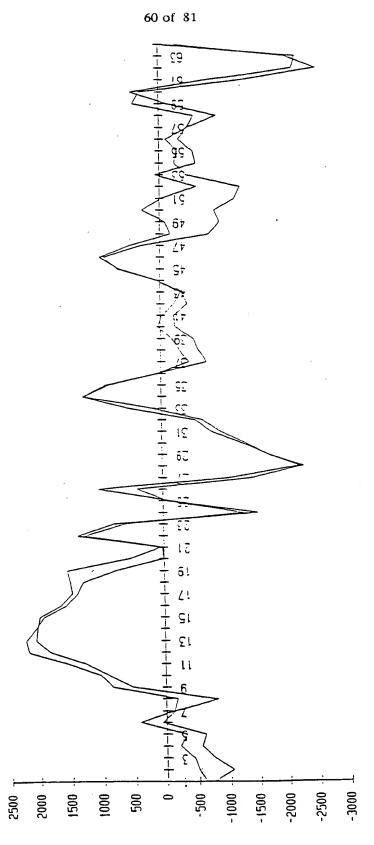


FIG. 41a

FIG. 41b



\$20 After Shifting: Corr = 966



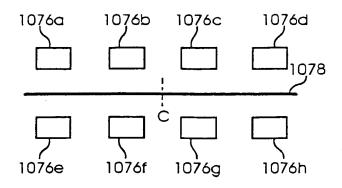


FIG. 43

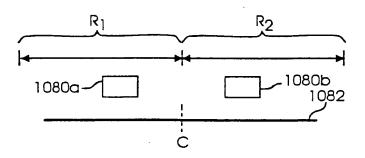


FIG. 44

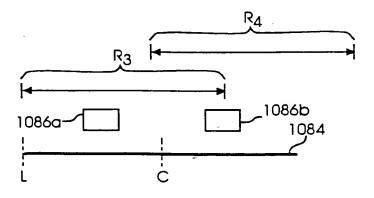


FIG. 45



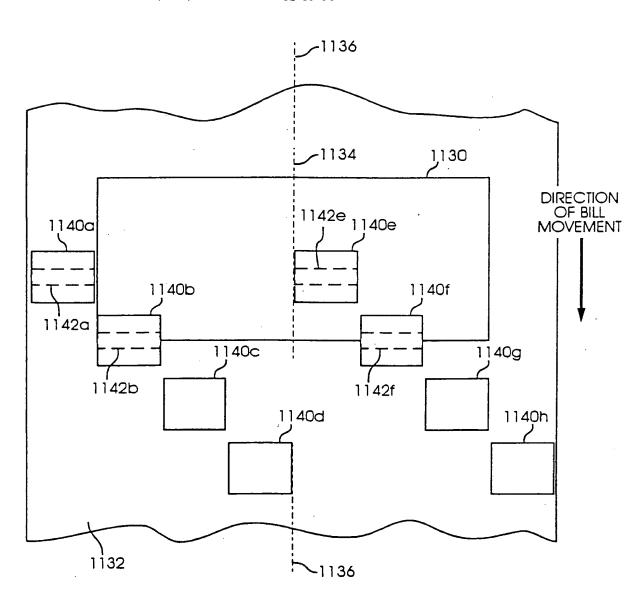


FIG. 46

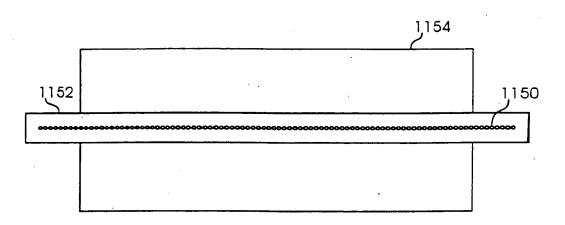


FIG. 47a

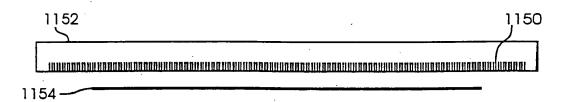


FIG. 47b

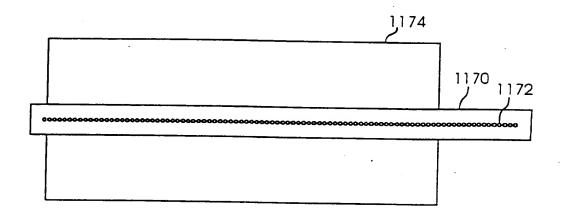


FIG. 48

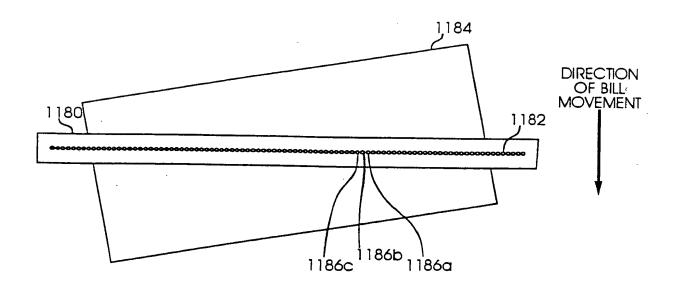


FIG. 49



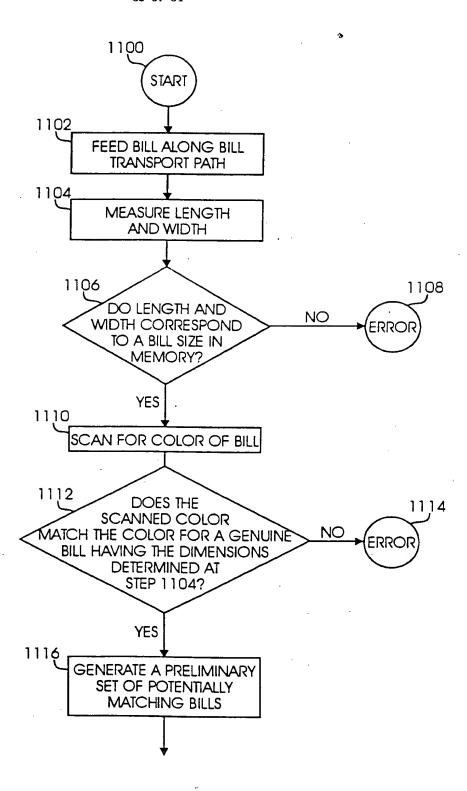
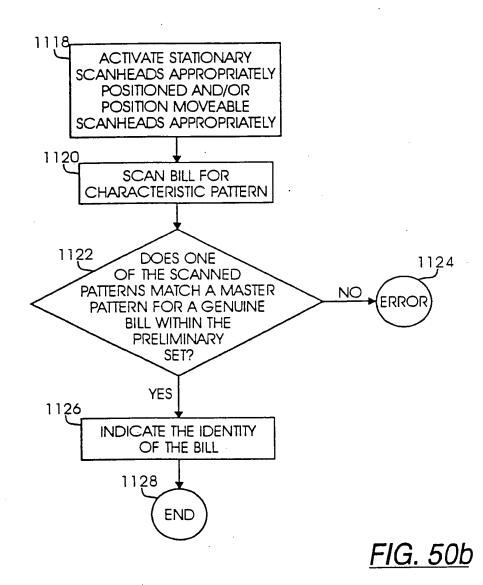
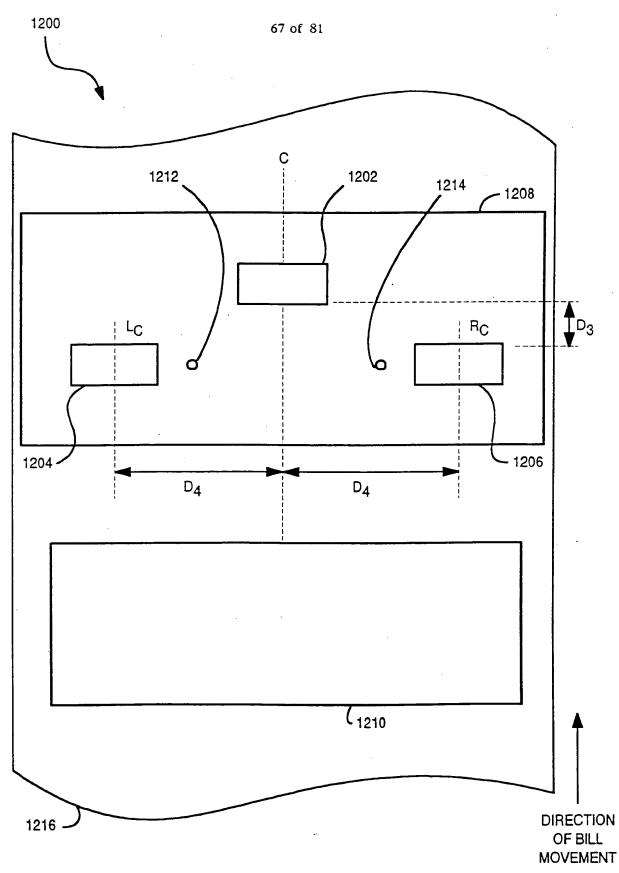
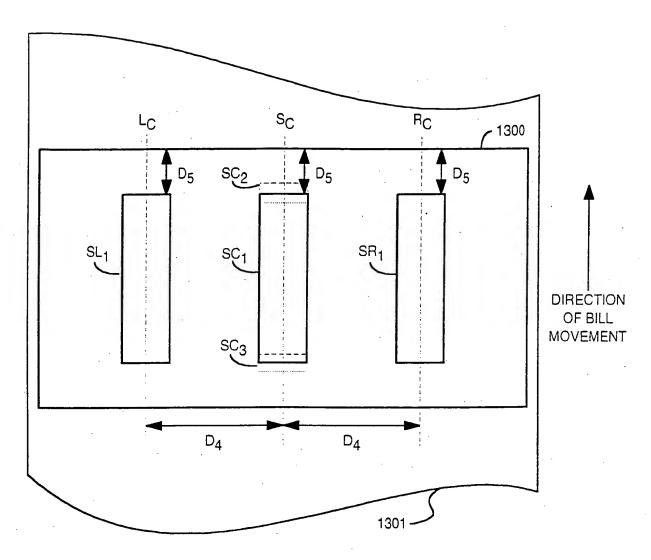


FIG. 50a

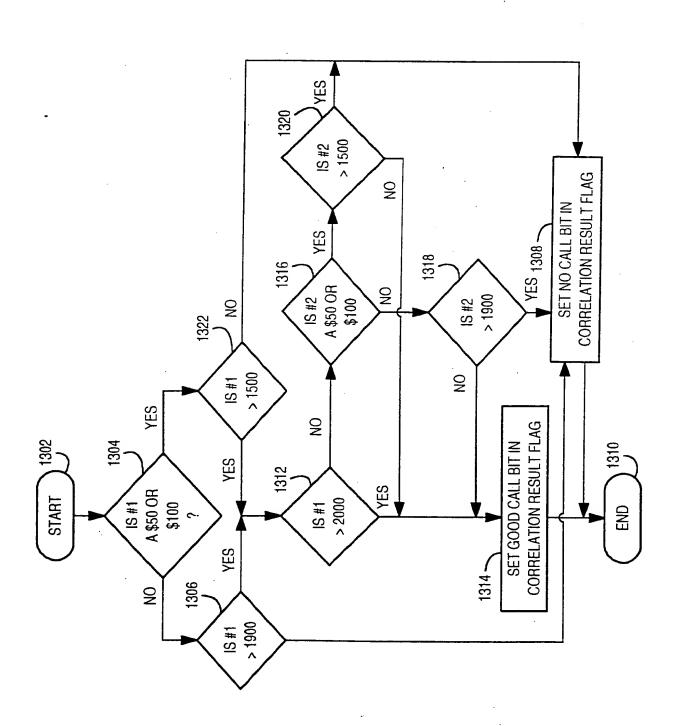


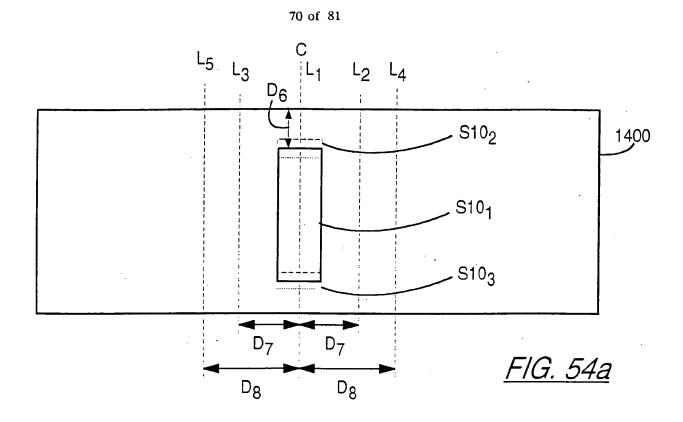


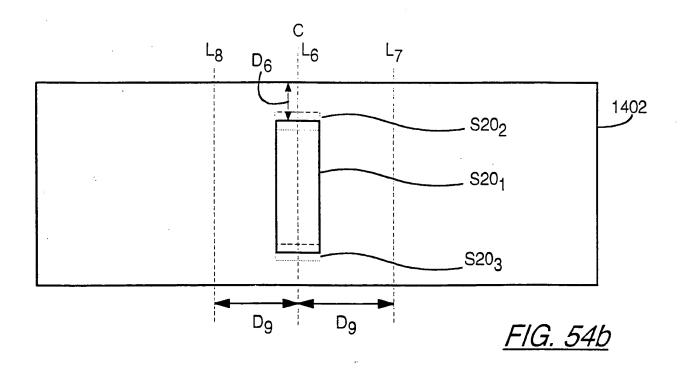
*FIG. 51* 



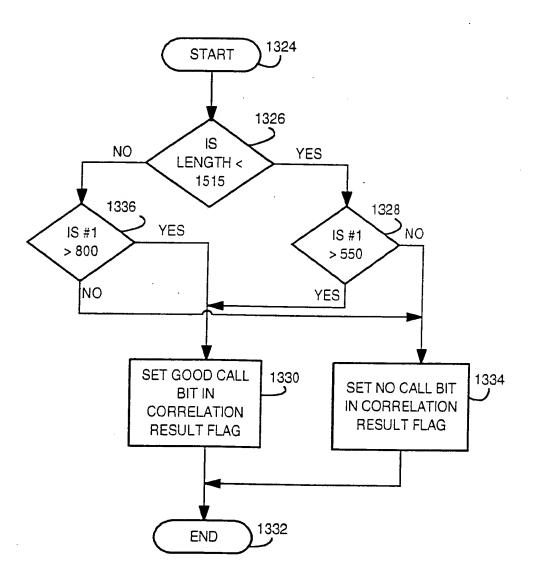
*FIG. 52* 





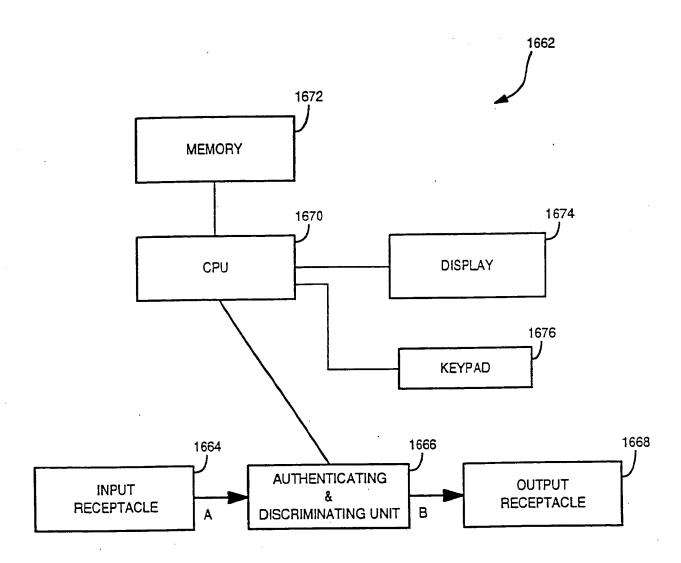


71 of 81



*FIG. 55* 

72 of 81



*FIG. 56* 

73 of 81

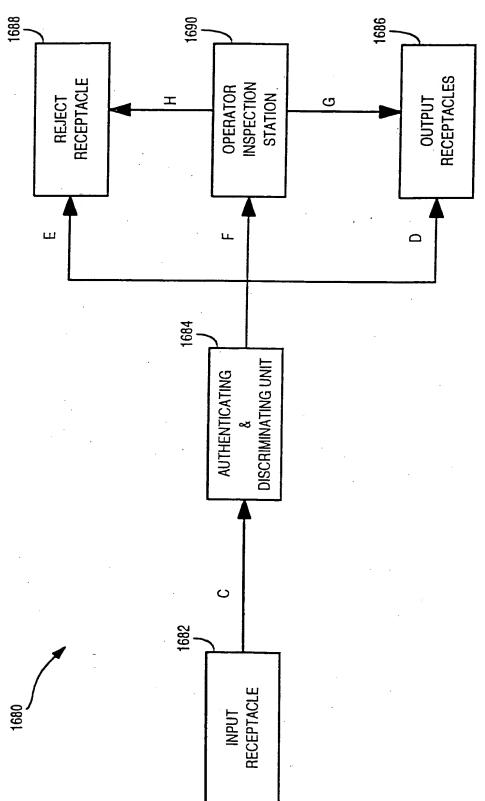
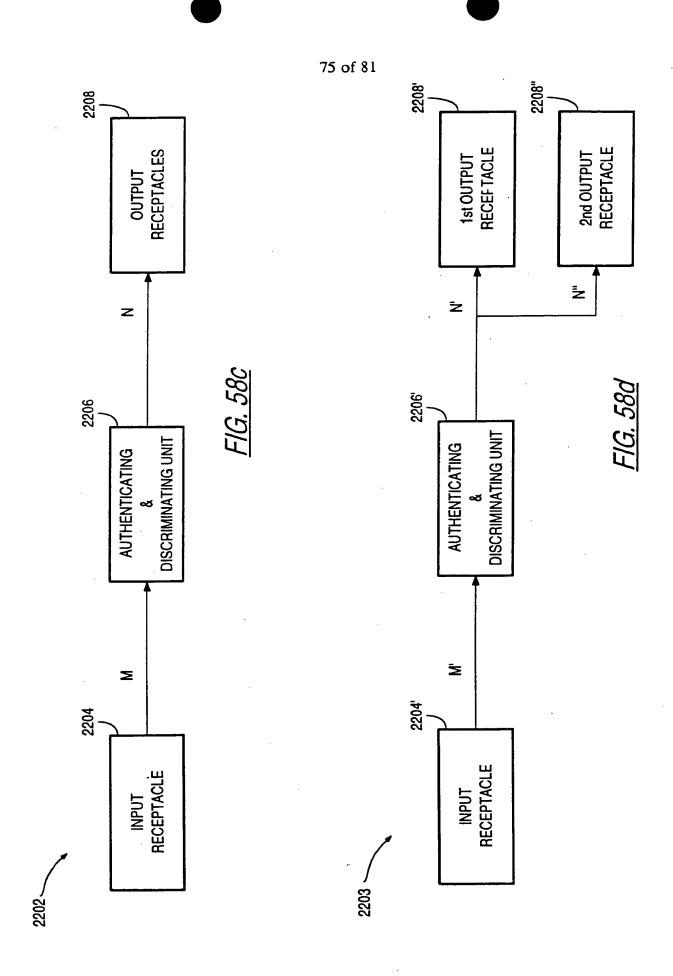


FIG. 57

1698" 1698' 1699 1698 1699 2nd OUTPUT RECEPTACLE RECEPTACLE OPERATOR INSPECTION RECEPTACLE INSPECTION 1st OUTPUT OPERATOR STATION STATION OUTPUT =- $\mathbf{x}$ 1696' 1696 **DISCRIMINATING UNIT DISCRIMINATING UNIT AUTHENTICATING AUTHENTICATING** 1693 1692 FIG. 58b 1694' 1694 INPUT RECEPTACLE RECEPTACLE INPUT



76 of 81

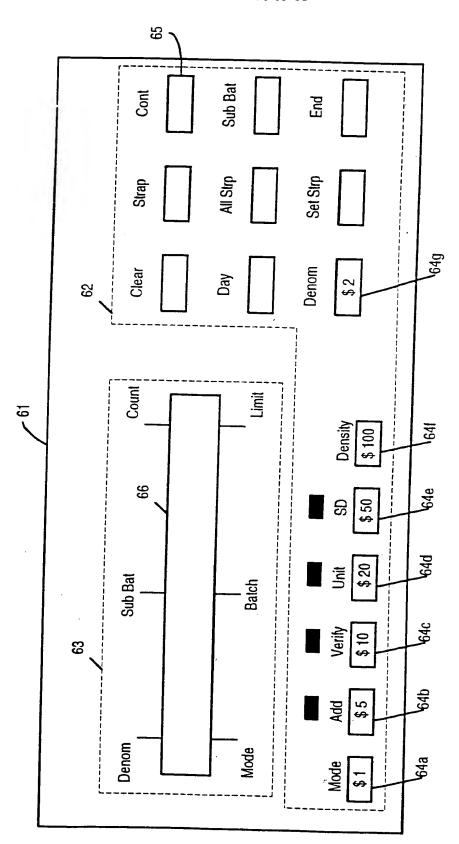


FIG. 59

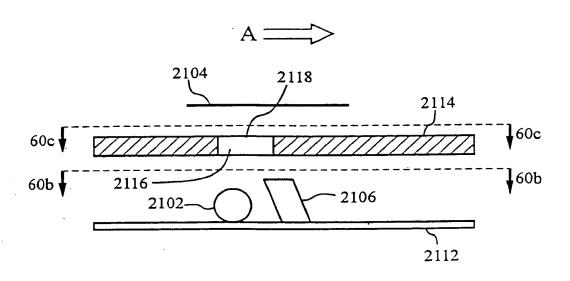


FIG. 60a

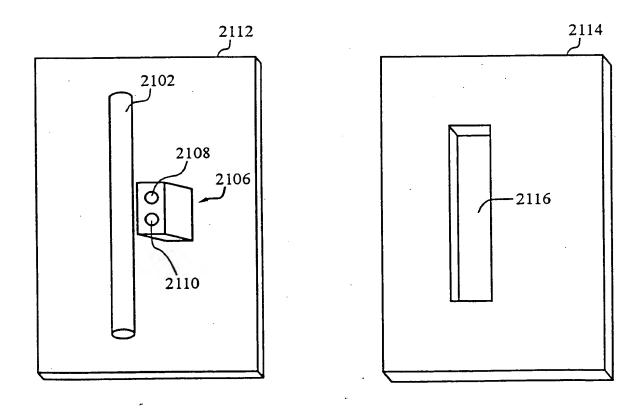


FIG. 60b

FIG. 60c

78 of 81

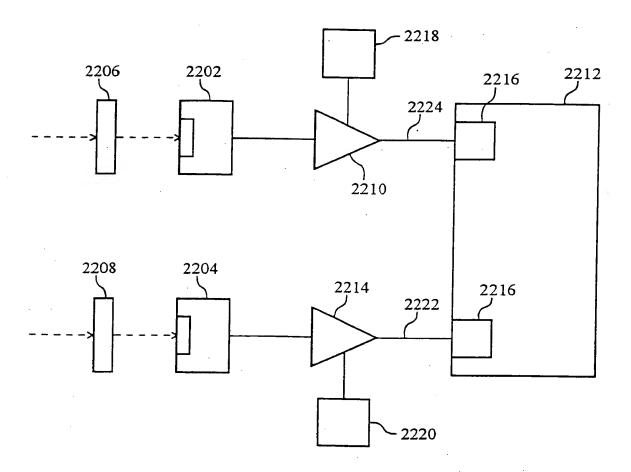
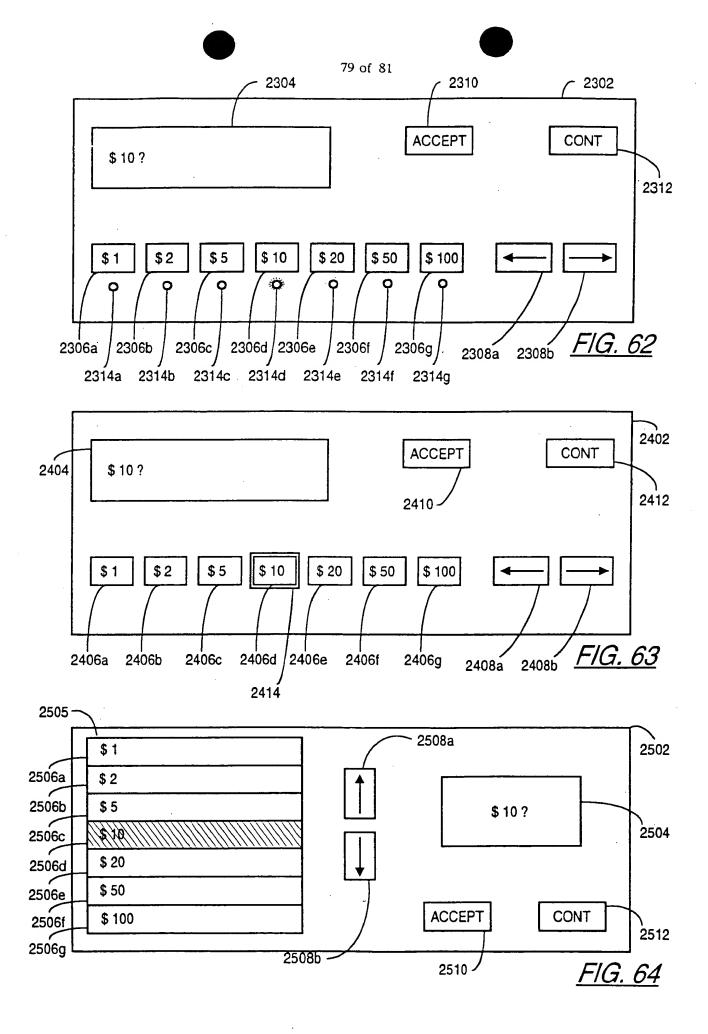
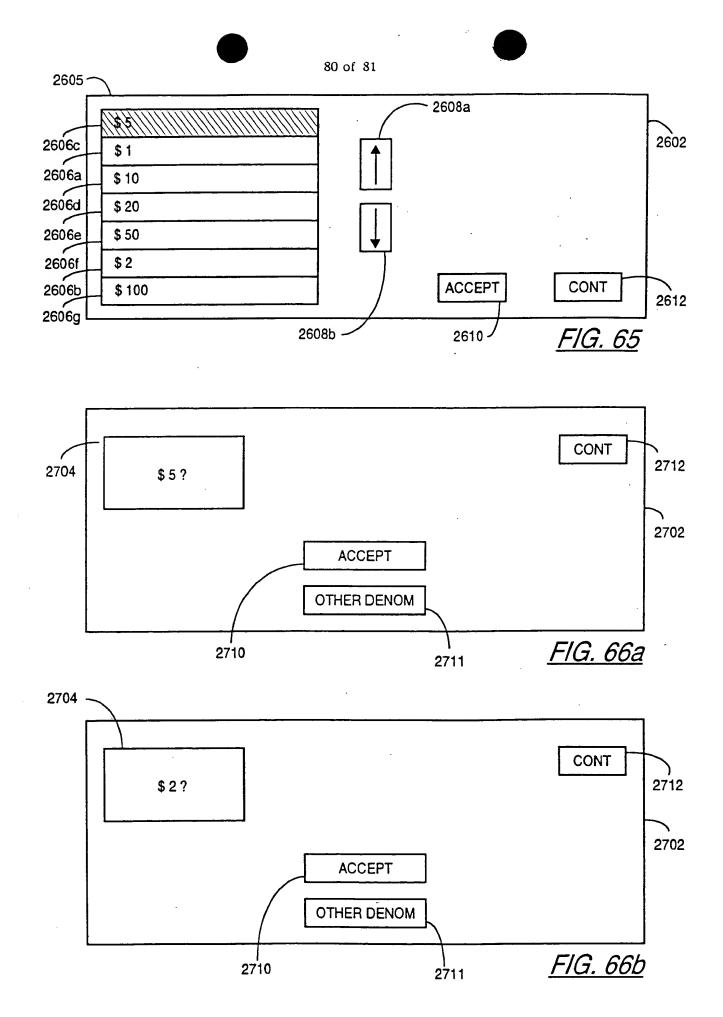


FIG. 61





81 of 81

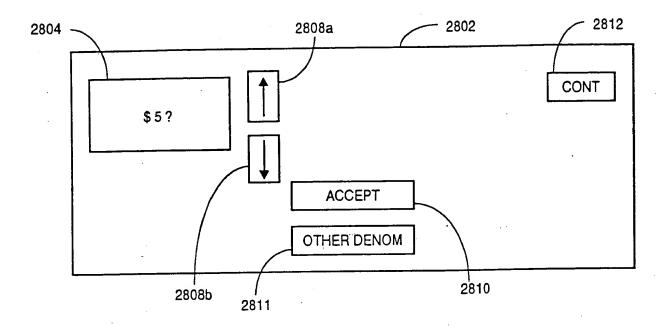
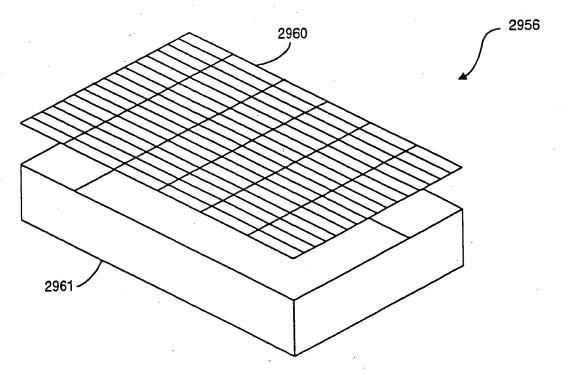


FIG. 67



*FIG. 68*